Spectr. Temp

Focus .....

Spectr. Temp

Exp. Mtr.	

Spectr. Temp. ..... Dome Temp./Hum. ..... Transparency Conditions .....

Focus .....

Spectr. Temp. ..... Dome Temp./Hum. .....

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
				DAVID DUNLAP OBSERVATORY							
				74" LOGBOOK							
				VOL: 81							
				Plate Nos: cc 33193 - ce 09810							
				DATE: May 31, 1995 — Sep 11 1995							

pg #1 (5)

Date 1995 May 31/Jun 1 Observers [K.K.] Tn./Smt

Emulsion Batches:

30 cgain

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Comparison Exp.	Exp. Mtr.
CC 331 93/94	inboard/outboard	HARTMANN						FeNe Clear	15/30	BG39 Filter
95	BIAS(4)			21 10						
96	Comp							FeNe Clear	20s	
97	HD97603	11 0847	+21 0418	21 1625		2 23 W			120s	9180
98	Comp							"	20	
99	Comp							"	"	
CC 33200	HD87696	10 01 32	+35 43 56	21 2820		3 55 W			900	10100
01	COMP							FeNe Clear	20	
02	HD87696			21 48 06		4 13 W			800	8900
03	COMP							"	20	
04	BIAS(4)			22 04				"	20/20	
85/86	HD102647 comp	11 4358	+15 0752	22 0947		2 41 W			84	8635
07	Comp									
08	HD102647			22 1721		2 46 W			95	~~8900~~ 9100
09	Comp					~~2 46 W~~		FeNe Clear	20	

CCD
Spectr. Temp. ..... Dome Temp./Hum. +21.0°C 50.7% Transparency Conditions ... Very hazy .....

Focus .. 6.74 ..... 30C Gain (6)

Spectr. Temp. ..... Dome Temp./Hum. ..... ε Lambda 435 0 50 1024 4 1 CCDFast

Comparison Filter	Comparison Exp.	Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
	15/30	BG 39 Filter				CASS CCD	600 l/mm G-2634	230μ	4160Å	3/4	focus test		
										1/2			
	20s									5			
	120s	9180		B 2.68	A4V					6	KK A*		12.1K
	20									7			
	11									8			
	900	10100	3"	B 4.66	A7V					9	KK A*	slight saturation at red end on 24th col.	16555
	20									10			
	800	8900								9	KK A*	focus was a bit better.	12.5K
	20									10			
	20/20									1/10			
	84	8635		2.23	A3V					11	KK A*		10K
										12			
	95	~~10,000~~ 8900		"	"					13	KK A*	first attempt saturated trailed	7.0K
	20									14			

19#2 (7)

Date 1995 May 31 / Jun 1 Observers [kK] Tn / Smt

Emulsion Batches: 30 again

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Comparison Exp.	Exp. Mtr.
cc33210	Comp							FeNe clear	20s	BG39 Filter
11	HD106251	12 08 20	+10 49 08	22 29 13		02 58 W			1372	4800
12	Comp							FeNe clear	20s	
13	Comp							"	4	
14	HD106591	12 10 29	+57 35 18	23 08 29 17		03 14 W			123	6,800
15	Comp							FeNe clear	20s	
16	HD106591	"	"	23 12 30					124	6,800
17	Comp							FeNe clear	20	
18	BIAS (4)			23 16					—	
19	Comp							"	20	
20	HD125161	14 12 37	+51 49 42	23 21 54		1 34 W			500	8280
21	Comp							"	20	
22	HD125161			23 34 48		1 47 W			500	7500
23	COMP							"	20	
24	COMP							"	20	

Spectr. Temp. ...-100..... Dome Temp./Hum. 19.7°C/61.5% Transparency Conditions ...Thin cloud → clearing.....

Focus .....6.74.....

Spectr. Temp. ..... Dome Temp./Hum. ..... c Lambda 435 0 50 1024 4 1 redone

(8) MAX

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
BG39 Filter				CASSCCD	600 k/mm G=2634	230u	4160Å	15			
4,800	3"-4"	B 6.06	A2m					16	KK A*		5.2k
								17			
								18			
6,000		B 3.39	A3V					19	KK A*		5.3k
								20			
6,800		B 3.71	A3V					19	"		12.5k
								21			
								1			
								22			
8280		✓ 4.75	A7V					23	KK A*	Saturated at red end yet again in 23rd col.	
								22			
7500		"	"					23	"		14.0k
								24			
								25			

pg # 3 (9)

Date 1995 May 31/Jun 1 Observers [KK] Tn/Sat

Emulsion Batches:

30 cgain

Spectr. Tem
Focus
Spectr. Tem

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Comparison Exp.	Exp. Mtr. #639
cc 33225	HD125162	14 12 35	+46 32 51	23 51 38		1 59 W			240	6380
26	COMP							FeNe clear	20	
27	BIAS(4)			23 59					—	
28	COMP							"	20	
29	HD141795	15 45 50	+4 46 43	0 05 13		0 37 W			200	7100
30	COMP							"	20	
31	COMP							"	"	
32	HD130841	14 45 21	-15 37 34	0 14 26		1 46 W			150	7950
33	COMP							"	20	
34	HD130841			0 19 23		1 52 W			200	9500
35	COMP							"	20	
36	COMP							"	"	
37	HD155125	17 04 39	-15 36 04	0 29 52		0 16 E			150	12500
38	COMP							"	20	
39	HD155125			0 36 24		0 11 E			151	12400
40	COMP							"	20	

Spectr. Temp. -100 °C Dome Temp./Hum. 18.0°C / 66.9% Transparency Conditions ..clear.. (10)

Focus ..6.74.. FANS OFF

Spectr. Temp. .. Dome Temp./Hum. .. 430 0 50 1024 4 1 redfat

Exp. Mtr. BG 39	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	~~Emulsion~~	~~P.H.~~	Program	Remarks	Quality
6380		V 4.25	A0 p	CASS CCD	600 ℓ/mm(C) G = 2634	230μ	4160Å	26	KK A*		9.6K
								27			
								1			
								28			
7000		V 3.73	A2m					29	KK A*		9.6K
								30			
								5			
7350		B 2.90	A3IV					6	"	trailed a bit	8.0K
								7			
9500		"	"					6	"	trailed a lot.	5.0K
								7			
								8			
12 500		B 2.49	A1V					9	"	trailed wide	4.4K
								10			
12 400		"	"					9	"	trailed	8.5K
								10			

pg#1 (11) Wed / Thurs

Date 1995 May 31 / June 1 Observers [K.K.] J.a. / Scot

Emulsion Batches:
2
30 again

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Comparison Exp.	Exp Mtr
CC33241	Comp								20	8639
42	HD156164			00 4808		00 05E			8s	8400
43	Comp								20	
44	HD156164			00 55 22					7s	8430
45	Comp							FeNe	20s	
46	"							"	"	
47	HD159561	17 30 18	+12 37 58	01 02 42		00 11E			45	8500
48	Comp								20	
49	BIAS(4)			01 06						
50	Comp									
51	HD172167	18 35 15	+38 44 12	01 13 01		01 04E			16	
52	"			01 15 02					13	
53	Comp									
CG41004/07	HD163075	17 49 15	+46 40 10	01 30				1 y	67mg	
08/09	"	"	"					0 x	133mg	

Spectr. Temp. ..... Dome Temp./Hum. +18.0°C 65%H Transparency Conditions .. clear ..... (12)

Focus ..... 6.74 ..... FANS OFF

Spectr. Temp. ..... Dome Temp./Hum. ..... 435 0 50 1024 4 1 ccdfst MAX

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	~~Emulsion~~	P.H.	Program	Remarks	Quality
8639				CHSS CCD	600 l/mm G=2634	230u	4/608	10			
8,400								11			15K
								12			
6100								13			9.1K
								14			
								15			
7300	2-3"							16			10
	"							17			
								1			
								18			
		0.04						19	Vega for Std vel use	Fast guided	10K
								19	" "		14K
								20			24K
	3-4"	646 U	KIII	CCD CCD TV GUIDER		above 240μ		—	Seeing fast No wind		
	"							—		No Fans	
										Dome N W	

pg 5 (13)

Date 1995 May 31/June 1. Observers [KH] J.A./Sod

Emulsion Batches:

30 again for [KK]

90 again for [RM]

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Comparison Exp.
cc 33254	Comp							FeNe Clear	20
55	HD177724	19 00 49	+13 42 53	01 43 35		01 02 E			85
56	"	"	"	014339					72
57	Comp							"	20
58	Comp							"	20
59	HD187642	19 45 54	+8 36 15	01 52 33					77
60	Comp							"	20
61	BIAS (4)			2 00					-
62	Comp							FeNe Clear	20
63	HD187691	19 46 14	+10 09 55	02 05 20		01 14 E			649
64	Comp							FeNe Clear	20
65/76	FLATS x12					01 08 E	+23°	TUNG Clear	1 sec
cc 33277/78	Inboard/outboard HARTMAN					01 E	+23°	FeAr	60/60
79	BIAS (4)								
~~80~~	~~Comp~~								

Spectr. Temp. ..... Dome Temp./Hum. 77..... Transparency Conditions .Slightly hazy.....

Focus ..... 6.74 .....

Spectr. Temp. CCD -100.8°C..... Dome Temp./Hum. 17.0°C.....

FANS OFF

435 0 50 1024 4 1 redbot

(14)

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
BG 39		30	C gain		600 l/mm	230μ	4160Å	21			
6,700		2.99	AOVn					22	kk A+		11K
5 500								22			7.3K
								24			
								23			
								25	kk A+		
								26			
								1			
								27			
5300		5.41 ✓	F8V					28	Std bed		6.K
								.			
								2			14K
90 C GAin now					1800 l/mm G=5930	30μ	6400Å	3/4	focus test	T = +17.1°C	
focus setting of 6.74 didn't need changing								1/2		410 0 50 1024 4 1 redbot	

84 DG (15)

Date 1995 May 31/June 1 Observers [Rm] Tn / Sat

Emulsion Batches:

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Comparison Exp.
CC3328O	Comp							FeAr clear	60
81	HD173297	18 39 20	-20 45	02 45 54		0 42 W			1230
82	COMP							FeAr clear	60
83	BIAS(4)			3 15					—
84	COMP							FeAr clear	60
85	HD180583	19 12 00	+27 45	3 17 51		0 27 W			300
86	COMP							FeAr clear	60
87	Comp							FeAr clear	60
88	HD203156	21 15 23	+37 48 55	3 30 20		1 24 E			240
89	COMP							"	60
90	COMP							"	"
91	HD187691	19 46 14	+10 09 55	3 42 19		0 14 W			130
92	COMP							"	60
93-97	FLAT x5					0 22 W	+10°	Tung Lamp	7
98	BIAS(4)			3 52					—

Spectr. Temp. -101.7°C Dome Temp./Hum. 17.2°C/61.5% Transparency Conditions . . clear

Focus . . 6.74

Spectr. Temp. . . . . Dome Temp./Hum. . . . . 410 0 50 1024 4 1 ccdfmt

(16)

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	~~Emulsion~~	P.H.	Program	Remarks	Quality
no filter				CASS CCD	1800 l/m G=5930	30μm	6400 Å	5			
2222	4"	(V) 7.48	~G0Ib					6	Rm	V350 Sgr	3.9K
								7			
								1			
								8			
3290	4"	(V) 6.19	F6I-IIb					9	Rm	V473 Lyr	5.4K
								10			
								12			
3540	4"	V 5.8 -5.9	F2					13	Rm	V1334 Cyg	5.5K
								14			
								15			
3650		V 5.11	F8I					16	Std. Vel.	sky getting bright.	6.4K
								17			
								18			12.3K
		All backed up to Perseus & WORM						1			

Pg #1 SAT/San (17)

Date 1995 June 3/4 Observers Zhu/Tn

No observing For Tours - Cloudy then

Emulsion Batches:

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Comparison Exp.
CC332 99/300	inboard/outboard							FeAr Clear	60/120s
301	BIAS(4)								
302	Comp							FeNe Clear	60s FeNe
303	Ganymede	16 3440 (1995.5)	-21 11	00 26 15		00 36W			687
304	Comp							FeNe Clear	60s
305	Comp (intended source this time.)							FeAr Clear	60s
306	Ganymede			00 45 50		00 55W			796
307	Comp							FeAr Clear	60
308	Jupiter (center)			01 02 25					67
309	Jupiter (NORTH AREA)			01 05 33					175
310	Comp							FeAr Clear	60s
311	Callisto			01 12 09		01 27W			
312	Comp							FeAr Clear	60s
313	BIAS (4)								80s
314	HD167965	18 12 32	+42 07 30	01 43 24					80
315	Comp							FeAr Clear	60s

CCD
Spectr. Temp. −101.0°C ... Dome Temp./Hum. 17.0°C 84%H Transparency Conditions .. Hazy ... foggy ... 18

Focus ... 6.77 ... 90 C Gain

Spectr. Temp. ... Dome Temp./Hum. 15.5°C ... 84.7%H

c Lambda

CCD Flat 435 0 50 1034 4 1

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
BG39 Filter				CASS	600 l/mm	250	4300Å	3/4			
								1/2			
								5			4.5
		B									
≃800		5.44						6			
								7			2K
								8			
960								9			
								10			
12000								11			3.3K
18,000								12			5.8K
								13			
500		B 6.5						14			
								15			
								1/2			
		V 5.59	B7 IV					16	encoder Normalization	[No Beginning Comp] step 1 of observation started at angle	
								17			

Pg #1 Pg #2 (19) SAT/SUN

Date .1. Date .1995 June 3/4.... Observers .Zhu/LTG.....

Emulsion Batches:
.....
.....
.....

Plate No.	Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comp Type/Filter
CC332	CC33316	Comp							Feth Clear 60s
31	17	HD 165341	18 0024	+02 31 22	01 5845		00 38 W		775
31	18	Comp							Feth Clear 60s
30	19	HD165341			02 1610				705
30	20	Comp							Feth Clear 60
30	21	BIAS(4)			07 34				
36	22	Comp							Feth Clear
30	23	HD185144	19 3233	+69 29 28	02 4159		00 9 E		597
30	24	Comp						60s	Fe Hr Clear
30	25	Comp						60s	"
31	26	HD185395	19 3346	+49 5922	03 0316		00 03 W		299 60 Sec
31	27	Comp						Feth Clear	
31	28	HD185395			03 1311		00 14 W		
31	29	Comp						Feth	60s
31	30	BIAS(4)							
31									

ctr. Temp. ..... Dome Temp./Hum. 15.4°C .84.7%H Transparency Conditions .. Hazy .....

is ..... 6.77 .....

ctr. Temp. ..... Dome Temp./Hum. ..... (Cumbola)

20 MAX

Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
BG39	Poor Seeing			CHSS CCD	600 l/mm G=2670	250	4300B	18			
5650	7"	B=4.89	K0V					19	Th-Ar	70 Oph [300/1 S/N]	11.0K
								20			
4800		B 4.84	K0V					21			7.5K
								22			
								12			
								23			
4300		B=5.4	K0V					24	Th-Ar		14K
								25			
								26			
3500		B=4.86	F4V					27			8.8K
								28			
3500								27			10K
								28			
								12			

Pgm 3 SAT/SUN (21)

Date . 1995 June 3/4 .... Observers . Zhu / Tu .....

Emulsion Batches:

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.....

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Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Comparison Exp.
cc 33331	Comp							Fe Ar Clear	60 sec
32	HD172167	18 33 33	+38 44 26	03 27 52					13s
33	"			03 30 42					"
34	Comp								
35/44	FLATS x 10					01 33W	+38 44	TUNG Clear	5sec
cc 33345/46	inboard/outboard	HARIMAN		0343		"	"	Fe Ar clear	60/120

Spectr. Temp. ..... Dome Temp./Hum. +14.4°C 82% H Transparency Conditions . Hazy .....

Focus ... 6.77 .....

Spectr. Temp. ..... Dome Temp./Hum. +14.1°C 81.0% H

(22)

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
				CASSCCD	600 l/m	25μ	4300Å	29			
≈4,400								30	Vega as Std.		1/K
								30			~~5K~~
								31			
								2			
14.1°C								3/4	focus Test		
			4/N to Perseus & WORM, but WORM didn't eject normally after copy completed.								

comparison
filter Exp
60sec
13
5sec
4 20

Pg#1 Sun/Mon (23)

Date 1995 June 4/5 Observers {V.S.S./T.

Emulsion Batches:

CSS 38G Time OK

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Comparison Exp.
CC 333 47/48	inboard/outboard bustraum					00 18 E	+41°	FeNe Ceva	24/37
49	BIAS x 4 Sum of 4 biases								
50	Comp	J2000						FeNe Ceva	25s
51	Ceres	13 53 35	+23 14 00	20 58 05		03 51 W			676
52	Comp							FeNe Ceva	25s
53	Ceres			21 14 35		04 09 W			805
54	Comp							FeNe Ceva	25s
55	Comp							4	25s
56	AC+56 45927 Vys 684B	13 00 34	+56 26 19	21 36 43		01 31 W			1484
57	Comp							FeNe Ceva	25s
58	AC+56 45927 Vys 684A	13 00 34	+56 26 19	22 04 47		02 11 W			2171
59	Comp							FeNe Ceva	25s
60	BIAS x 4			22 44					
61	Comp							FeNe Ceva	25s
62	HD 119850	13 40 36	+15 27	22 53 19		01 56 W		FCNe	25
63	Comp								

CCD Spectr. Tem
Spectr Tem
No Filter raw
750
260
Exp mate
450
1760
340

CCD
Spectr. Temp. −100°C ..... Dome Temp./Hum. +19.0°C ..... 45% H Transparency Conditions ... slightly hazy (24)

Focus ... 6.73 .....

Spectr. Temp. ..... Dome Temp./Hum. +17.6°C 48% H 90 again

c Lumbda 400 0 50 1024 4 1 CCOFits 400 in AX

Exp. Mtr.	Seeing	Pr. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
~~no filter~~				Cass CCD	1800 l/mm G=5140	306u	5303A	3/4	focus test		
								1/2			
								5		4 53 38 codes from t23 14 53 images test program.	
BG39 filter by mistake 340	2"	8.7	G2					6	Std vel use		860
								7		spectrograph control in transit	
no Filter now 750								8	Std vel Repeat	Field checks OK with "Megastar"	820
								9			
								10			
260	*1-2"	10.7	M0					11	Vys pgm	The Pointer South component Vys 684AB [7 30/1 S/N]	
(Exp meter well balanced too)								12		* Close Pair well separated	
450	2"	10.7	M0					13	Vys pgm	Brighter one of NW component	25/1
								14			
								1/2			
								15			8.2K
1260	2"	8.48	M1					16	Std vel (Marcy)		900 max

pg #2 (25) Sun / Mon

Date 1995 June 4/5 Observers {V.y.s.} T.y

Emulsion Batches:

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Comparison Exp.	
cc 33364	Comp							FeNe Clear	25s	
65	HD 144579	16 01 30	+39 24 00	23 13 36		00 11 E			322	2110
66	Comp							FeNe Clear	25s	
GC 410 10/13	HD144579	16 01 30	+39 2400	2323		00 04 E		4x	67m	
GC 410 14/15	"							2x	133m	
cc 33367	Comp							FeNe Clear	25	
68	BD+47 2415B	16 55 06	+47 30 55	23 36 10		00 09 E			2241	630
69	Comp							FeNe Clear	25	
70	Bills x4			00 16						
71	BD+47 2415A	16 55 06	+47 30 55	00 17 32		00 09 W			843	1950
72	Comp							FeNe Clear	25	
73	BD+47 2415B	16 55 06	+47 30 55	00 34 31		00 46 W			2031	570
74	Comp							FeNe Clear	25	
75	Vys 886	≈16 55 06	+47 31	01 12 20		01 12 W			1290	840
76	Comp							FeNe Clear	25s	

CCD Spectr. Temp. −100.5 °C Dome Temp./Hum. +17.5°C 47.9% H Transparency Conditions .... Hazy (good at Zenith).

Focus ... G:7.3 .....

Spectr. Temp. ..... Dome Temp./Hum. +16.5°C 47.7% H No wind at all (26)

Exp. Mtr.	Seeing	Proj. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
				CASSCCD	1800 l/mm G=5140	306μ	5303A	18			
2110	<2"	6.66	G8V					19	Std bel		max 47K
								20			
		6.66	G8V		above slit				seeing test NE fan only		
								21			
630	<2"	11.2	K8	Nice separation from brighter component				22	Vys pgm (close	Vys 887B Faint one to NE Hand guiding)	max 450
								23			
								1/2			
1950	1-2"	29.5						24	Vys pgm	Brighter of two	max 2.5K
								25			9K
570	2"	11.2	K8					26	Vys pgm (hand	faint one again	
								27		guiding not so good this time)	
2400		≥10	K?					28	Vys 886	Sbig guided	max 3.4
		~~≥10~~						29			9.5K

Pg #3 (27) sun/moon

Date 1995 June 4/5 Observers E. Vys E. Tes

Emulsion Batches:

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Comparison Exp.
cc33377	BIAS x4	Sum of 4		01 37					
78	Comp							FeNe Clear	25s
79	BD+272853C	17 33 15	+275716	01 4445		01 24 W			2457
80	Comp							FeNe Clear	25s
81	BD+272853AB	17 33 15	+275716	02 29 24		01 47 W			
82	Comp							FeNe Clear	25s
83	BIAS x 4								
84	Comp							FeNe Clear	25
85	AC+62 26749	17 3430	+61 4500	02 59 06 edit header time		2 27 W			1691
86	Comp							FeNe Clear	25s
87	Comp								25
88	HD186791	19 41 30	+10 2210	03 3649		00 26 W			43
89	Comp							FeNe Clear	25
90 98	FLATS x 9					00 34 W	+1035	TUNG Ap 1/2	5s
99	BIAS x4					-			

Spectr. Temp. (CCD) −100.3°C ..... Dome Temp./Hum. ..... Transparency Conditions Slightly hazy .....

Focus ... 6.73 .....

Spectr. Temp. (CCD) −100.4°C ..... Dome Temp./Hum. 41.6.3°C ... 52% 11 (c Lumbula)

28

Exp. Mtr.	Seeing	Pic. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
				CHSS CCD	1800 l/m G=5140	306μ	5303A	1/2			
								5c:			
385	2"	11.8	M0p					6	Vys 87m	The four ENE are Vys 79C S/N 730/1	
								7			
~900	2"-3"	210	K?					~~13~~	Vys 89m	Bright one [AB?]	max 670
								14			
								1/2			
								15			
790	3"	9.95	M1V					16/13	Vys 91m	Vys 62C. Which are A and B?	
								17			
								18			
8500		2.72	K3II					19	Std bel		8.5K
								20			
								30			13K
								1/2			

89#1 Mon/Tues (29)

Date 1995 June 5/6 Observers B.M./T.M.

Emulsion Batches:

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Comparison Exp.
CC33400/01	Inboard/Outboard		Hartman			00 15W	+41°	FeNe Clear	25/35
02	BIAS x4	Sum of 4 biases							
03	Comp							FeNe Clear	25s
04	HD84441	09 40 12	+24 14	21 06 48		04 01W			55
05	Comp							FeNe Clear	25s
06	Comp							"	"
07	Ceres	09 55 00 (2000)	+23 00	21 13 35		04 13 W			
08	Comp							FeNe Clear	25s
09/14	FLATS x 6					04 16W	+23 07	Dome Ap 1/2	5s
CC33415	BIAS x4	Sum of 4 Biases							
CC33410 16/19	HD128718	14 33 24	+48 39	21 42				4 x	67 ms
CC33410 20/21	"	"				06 15E		2 x	133 ms
CC33416/17	Inboard/Outboard		Hartman			00 06E	+48°	Rear Clear	40/60
CC33418	BIAS (4)								
19	Comp							Rear clear	40

CCD Spectr. Temp. −100°C Dome Temp./Hum. +21.1°C 48.7%N Transparency Conditions ... Hazy ... 3

Focus .. 6.70 for 1800 l/mm. Good For 600 l/mm 90 c/pixin

Spectr. Temp. ..... Dome Temp./Hum. ..... (100) (Lumbda)

CCD Fmt for 1800 l/mm ADU

410 0 50 1024 4 1 MAX

Exp. Mtr.	Seeing	Pwr. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
no filter				CASSCCD	1800 l/mm G=5140	306u	5303A				
								5			8.5K
8,400		2.98	G1 IT					6	Std Vel		5A
								7			
								8			
850	2"	8.7	G2 V					9	Minor Planet		
								10			
								11			
								1/2			
	<2" 5@4 7h	6.7	F2	REV CCD TV GUIDER	4600	306u Slit			Seeing test	Dome NW	
I									" "	NO FAILS tonight	
				CASSCCD	600 l/mm C=3175	250u	6563A	4/5	Focus test	425 0 50 1024 4 1 CCD Fmt now	
								1/2			MAX
								12			2.2K

1942 Mon/Tues (31)

Date 1995 June 5/6 Observers B.In./Tu

Emulsion Batches:

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Comparison Exp.
cc33420	SKY			221912		0C 00 00	+43 13 15		1806
21	SKY			224925					1839
22	SKY			232052					1800
23	Comp							Fe Ar Clear	40
24	BIAS (4)								
25/29	FLATS ~~x7~~ x5. (last 2 after power back up) (All should be OK)							Tung Ap 1/8	9s
cc33430/31	INBOARD/OUT BOARD HARTMAN					00 00 00	+43 13 15	Fe Ar Clear	40/80
32	Comp					"	"	Fe Ar Clear	40s
33	SKY			002759		"	"		1827
34	SKY			005844		"	"		1806
35	SKY			012911		"	"		1810
36	Comp					"	"	Fe Ar Clear	40s
37	BIAS (4)					"	"		
38/40	FLATS x3					"	"	TUNG Ap 1/8	9sa

CCD
Spectr. Temp. -100.6°C ..... Dome Temp./Hum. +20.3°C ..... 51.5% Transparency Conditions ... Slightly Hazy ... (32)

Focus ... 6.70 ..... no cloud per se

CCD
Spectr. Temp. ..... Dome Temp./Hum. +18.0°C ..... 58.3% c Lambda

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
no filter 102				CASSCCD	600 l/mm G=3125	2 Du	6563Å ±5Å	13 ci		Dome WNW, Telescope on WEST SIDE	
3r 90								14	1/4	Moon in WSW! [Strongest 30 Hz above background]	
88								15			
40								16			2.8K
								1/2			
9s								17		Complete power failure while flattening	11K
6.70 OK still				CASS CCD	600 l/mm G=3050	2 Du	6180° ±5Å	3/4	focus test	Night on	
								18 ci		Uniform Haze But Zenith byo good.	
Exp meter off due to power failure earlier No Filter								19		Sky seems brighter now (I can see stars with guide camera now.	MAX 3000 Hz
83								20			
75								21			
								22			2.9K
								1.1/2			
								23			107K

PM #1

Date 1995 June 6/7 (33) Observers Bln / Smt + Stacey Smith

Emulsion Batches:

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Comparison Exp.	Spectr. Tem / Focus / Spectr. Tem / Fwd Mtr
CC3344 42	INBOARD/OUTBOARD							FeAr clear	30/60	
43	BIAS(4)			22 35					—	
44	COMP							FeAr clear	60	
45	SKY			22 39 10		$0^h\ 0^m$	$+43^\circ 59'$		1800	198
46	SKY			23 15 20		"	"		1800	150
47	SKY			23 47 40		"	"		1800	120
48	COMP							FeAr clear	60	
49	BIAS(4)			0 23					—	
50-52	FLAT x 3					"	"	Tung 4 Ap	4	
53	BIAS(4)			0 32					—	
54/55	INBOARD/OUTBOARD							FeNe clear	30/50	
56	BIAS(4)			1 33					—	
57	COMP							FeAr clear	90	
58	SKY			1 39 46		$0^h\ 0^m$	$+43^\circ 59'$		1800	
	~~SKY~~					"	"		~~1800~~	

Spectr. Temp. −100.4°C Dome Temp./Hum. 20.8°C/61.4% @ Focus Test #1 Transparency Conditions cloudy with Moon poking through clouds

Focus ~~.....~~ 6.73/6.68 @5745Å/@5070Å

Spectr. Temp. ..... Dome Temp./Hum. 19.8°C/65.3% @ Focus Test #2

425 0 50 1024 41 ccdfmt (34)

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	~~Emulsion~~	P.H.	Program	Remarks	Quality
30/60				CASS CCD	600 ℓ/mm(C) G=2961	250μ	5745Å	3/4	FOCUS TEST	telescope on E side, Dome set too cool but tried to start	ENE
–								1			
60								5			
100	198							6	Bln	some "ghosting" off spectrum 45-49 cols ~12-42 cols	
180	150							7	"	cloud thinning, ∝ Bno vis. He8 & Vir no "ghosts" ∝ Lyr & ♃	
180	120							8	"	only thin cloud now.	
60								9			
–								1			
4								2			13.5K →15.4K
–								1			
30/30				CASS CCD	1000 ℓ/mm G=4980	306μ	5070Å ±3Å	3/4	FOCUS TEST	in focus	
–								1			
90								10		really weak	
150								11	Bln	only thin haze now, Moon has set	
~~180~~								~~12~~		nothing there but cosmic	
										I don't think we'll get this rate	

All backed up to Perseus only

1, PS #1

1995 Fri/Sat (35)

Date June 9/10 Observers Tn / [KK] STn.

Emulsion Batches:

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Comparison Ex
"	focus test								
ce 09233/34	inboard/outboard							ThA	
09235	bias (4)								
09236	comp							ThAr	1s
37	HD 8890	1 22 34	88 46 26	22:14:26		-11 22 E			236
38	comp							ThAr	1s
39	HD8890	1 22 34	88 46 26	22:20:35		-11 14 E			356
40	comp							ThAr	1s
41	HD8890	122 34	88 46 26	22:29.22		-11 05 E			377
42	comp							ThAr	1s
43	comp							ThAr	1s
44	HD 124897	14 11 06	19 42 11	22:20:55		2 03 W			177
45	Comp							ThAr	1s
46	HD 124897	14 11 06	19 42 11	22:25:21		2 07 W			132
47	comp							ThAr	1s
48	BIAS (4)			23 30					

Spectr. Temp. ...~100°C..... Dome Temp./Hum. 15.3°C / 52.4% Transparency Conditions ... cloudy.....

Focus .....244.....

Spectr. Temp. ..... Dome Temp./Hum. .....

(36)

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst. echelle	Grating/ x Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
				18.50*	300 .5790	60u 400a	6100				
		* Unchanged echelle tilt. Previous Run was indicated as				18.45?		1			
								3			
466	~4"	2.0	F8 Ib					4	Polaris		13.2K
								3			8.8K
396	4"	2.0	F8 Ib					4	Polaris		14 K
								3			8.5 K
30	4"	2.0	F8 Ib					4	Polaris	clouded out.	1 K
								3			8.7 K
								3			
153	4"	0.06	K2 IIIp					5		Std. Vel -only thing vis. 36!	4 K
								3			
363	Poor	0.06	K2 IIIp					5		Std Vel	8.3K
								3			9 K
								1/2			

Pg #2 Fri/SAT (37)

Date 1995 June 9/10 Observers [K.K.]V. Tm / S.T.m

Emulsion Batches:

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Comparison Exp
CC09249	Comp							ThAr	1s
50	HD 137909	15 23 42	29 27 01	23:35:42		1 14 W			600
51	Comp							ThAr	1
52	HD 137 909	15 23 42	29 27 01	23:49:27		133 W			1005
53	Comp							ThAr	1s
54	Comp			00 14 55				ThAr	1s
55	HD 131 156 (A) * edit	14 46 46	1930 57	00 15 33		2 35 W			960
56	Comp edit			00 33				ThAr	1
57	HD 131 156 (B)	14 46 46	19 30 57	00 35 29					1800
58	Comp							ThAr	1
59	HD 131 156 (A)	14 46 46	19 30 57	01 08 16		329 W			986
60	Comp							ThAr	1
61	BIAS (4)			01 29					
62	Comp							ThAr	1
63	ADS11632 (A)	18 41 42	59 29 00	01 48 53		0 31 W			1800 30c

Spectr. Temp. ...-100°C..... Dome Temp./Hum. ..14.6°C / 56.8% Transparency Conditions ...cleared...up...in...SW....

Focus .....2444.....

Spectr. Temp. ..... Dome Temp./Hum. ..13.6°C / 59.1%

38 CEOFMT 0 0 250 .024 4

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst. Echelle	Grating/ X Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
				18.50	300. 5790	60μ 400μ	6100	3			9K
292		3.66	F_p					6	BCrB KK prgm		4K
~~292~~								3			9K
460	poor 4"6"	3.66	F_p					6	BCrB KK prgm		4.6K
								3			9.4K
								3			
149	poor	4.74	G8V					4	NS slit prgm, star	brighter and south of pair	2.9K
								3	*	~~this image is likely ejected from pair ... Post HD star 6!!~~ Off	9.9K
30 ~~[illegible]~~		6.90	K5V					5	"	Fainter and north of pair	1.2K
								3			
171		4.74	G8V					6	"	brighter & south of pair	
								3			
								1			
								3			8K
0	4"	8.90	dm4					2		NORTH and brighter. I think	Poor due to background

Pg #3 Fri/SAT (39)

Date 1995 June 9/10 Observers [K.K.]/J.m./S.Tn

Emulsion Batches:
.....
.....
.....

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Comparison Exp.
ce09264	Comp							ThA	15
65	ADS 11632B	18 41 42	59 29 00	02 ~~20~~ 56	02 46 00	1 01 W			1510
66	Comp							Th A	15
67	ADS 11632(A)	18 41 42	59 29 00	02 55 34 ~~02 20 56~~	~~02 46 00~~	01 49 W ~~1 01 W~~			1859 ~~1510~~
68	Comp							Th A	1
69	BIAS(4)							ThA	1
70	Comp								
71	HD 101096	17 38 32	04 36 32	033559		2 51 W			179
72	Comp							Th A	1
73/79	Flats (x7)		4 37 15			2 55 W	+4 37		2
~~80~~	BIAS(4)								

CCD Spectr. Temp. −100.6°C ..... Dome Temp./Hum. 7.1°C 60.0% Transparency Conditions .. Part. Cloudy .....

Focus .244 .....

CCD Spectr. Temp. ..... Dome Temp./Hum. 12.7°C / 61.4% (Lambda)

40

Comparson Filter	Exp	Exp. Mtr.	Seeing	Mag.	Sp.	Inst.	Grating/ × Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
						echelle 18.50	300 l/mm 5790	60u 400u	6100Å	3c;			
		0		9.69 ~~8.90~~	~~dM5~~ dM4			400u = .225		1c;		South and slightly fainter	150 choice neg
										3c;			
		6		8.90	dM5					~~5~~ c;		North and brighter.	400
										3			8.1K
										1/3			
		240		2.77	K2 III CN0.5					2	Stilled	Std. Vel.	3.4K
										3			
								600u Weight = .205		7			11K
						Only, fully buttoned up to persons.							

Pg 1 1995 Mon/Tues (41)

Date June 12/13 Observers [KK] STn/Tn

Emulsion Batches: .....

.....

CSS 386 Time Reset .....

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Comparison Exp	Spectr. Tem
~~ce09281~~										Focus.....
~~b000~~	~~bias (4)~~									Spectr. Tem
~~Comp~~	~~comp~~			2						
~~ce09281~~	~~HD 8890~~	1 22 34	88 46 26	21 56 18						
START BELOW THIS LINE.										
ce09281/2	focus test / inbound / outbound.							ThA	2s 1s	
83	BIAS(4)			22 31						
84	Comp							ThA	1s	
~~85~~	HD8890	01 22 34	+88 46 26	22 3~~4~~57		10 51 E			220	220
86	Comp							ThA	1s	
87	HD8890			22 39 45					167	159
88	Comp							ThA	1s	
89	HD8890			22 43 51					173	315
90	Comp							ThA	1s	
91	Comp							ThA	1s	
92	HD187691	19 46 14	+10 09 55	22 59 48		3 35 E			600s	36
93	Comp							ThA	1s	

Spectr. Temp. ....-100°C.... Dome Temp./Hum. ~~14.4°C / 13.1%~~ 14.5°C / 51.5% Transparency Conditions ..~~cirrus~~ clear ....

Focus .....0.242..... ~~thin~~ full moon (42)

Spectr. Temp. ..... Dome Temp./Hum. ..... 90Cgain - 0 0 256 1024 4 1 CCDFMT

Exp. Mtr.	Seeing	~~Eye~~ Mag.	Sp.	Inst. Echelle	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
				18.50	~~300 l/mm~~ 300 l/mm 15790	60μ W 400μ H	6100 Å			- extreme difficulty with GPIB errors and software freeze-up!!!! (DV)	
									NOT SAVED.	- duration, counts, HA at end not recorded - ~~another hour then by~~ drifting off target	
				18.50	300 l/mm 15790		EW Slit Tonight.		Focus Test	100 trace used.	
									0 0 128	1024 81 CCDFMT	MAX 10K
								3		FOR Focus Test only	10K
220		2	F					5	KK pgm		12K
								3			
189								4			8K
								3			
215								5			8K
								3			9.5K
								3			
36	5"	5.11	F8V					4c.	Std Vel	Full moon ~45° away	9.5K
								3			

PG2 Mon/Tues (43)

Date 1995 June 12/13 Observers [K.K.] ST./T.

Emulsion Batches:

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Comparison Exp.
ce09294	bias (4)			23 19					
95	comp							ThAr	1s
96	HD 146361A	16 10 56	34 06 42	23 27 28		00 31W			693
97	Comp							ThAr	1s
98	HD146362B	16 10 56	+34 06 42	23 41 29		01 03 W			1740
99	Comp							ThAr	1s
300	HD146361 A	16 10 56	+34 06 42	00 14 53		01 20 W			787
301	comp							Th A	1s
302	bias (4)			00 30					
303	Comp							Th A	1s
304	ADS 13256 (A)	19 56 42	+10 28	00 42 41		-1 46 E			1533
305	Comp							Th A	1s
06	ADS 13256 (B)			01 11 08		-1 09 E			1900
07	Comp							ThA	1s
08	ADS 13256 (A)	19 56 42	10 28	01 46 15		-0 E			1521

Spectr. Temp. -100.8°C Dome Temp./Hum. 13.3°C / 58.3% Transparency Conditions clear

Focus .242

Spectr. Temp. Dome Temp./Hum. 12.9°C / 58.3% Full moon

(44)

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst echelle	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
					300 l/mm .5790	60μ W 450μ H	GIOO A	1			
		~~5.58~~	~~GOV~~					3		~~brighter and NE of pair~~	
80	4"	5.58	GOV					5	KK Vis Bin	brighter and NE of pair	1.4K
								3			
72	4"	6.59	GIV					6	KK Vis Bin	fainter and SW	1.3K
								3			
103		5.58	GOV					5	KK Vis Binary	brighter + NE pair	1.7K
								3			
								1			
								3		~~brighter and South~~	
3	4"	7.60						4		-poorly separated, bad seeing brighter and South	500
								3		Probably bad idea with moon 45° away	
8	3"-4"	7.80						5		poorly resolved fainter and north	300 close pair
								3		~~brighter and south~~	
1		7.60						4		-brighter and south of pair	

pg3 45

Date 1995 June 12/13. Observers EKK/Tn/STn

Emulsion Batches:

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Comparison Exp.
cc09309	Comp							Th A	1s
10	~~FE~~ bias (4)			02 14					
11	Comp							Th A	1s
12	HD 197964 (A)	20 42 01	15 45 50	02 21 11	~~02 21 11~~	-01 08 E			588
13	Comp							Th A	1s
14	HD 197963 (B)	20 42 01	15 45 50	02 33 19		-00 48 E			1040
15	Comp							Th A	1s
16	HD 197964 (A)	20 42 01	15 45 50	02 52 56		-00 36 E			581
17	Comp							Th A	1s
18	Comp								
19	HD 204867	21 24 18	-06 00 40	03 08 18		-01 09 E			400
20	Comp							Th A	1s
21	Comp							Th A	1s
22	HD 8890	01 22 34	88 46 26	03 22 40		-06 07 E			116
23	Comp								

Spectr. Temp. ..... Dome Temp./Hum. 12.3°C / 57.6% Transparency Conditions ..... clear but windy. Hazy.

Focus ..... .242 .....

Full moon.

Spectr. Temp. ..... Dome Temp./Hum. 12.2°C / 56.8%

46

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst. Echelle	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
					300 l/mm .5790	60μ W 439μ H	6100 Å	3			11K
								1			
								3			
114	4-5"	4.5	K1 IV					6		East and brighter of well separated pair	3 K
								3			
91		5.5	F7V					2		west and fainter of well separated pair	1.7 K
								3			
144	4-7"	4.5	K1 IV					6		East and brighter / well separated pair	2.6 K
		~~2.91~~	~~G0Ib~~					3			
								3			
138	~~5-8~~"	2.91	G0Ib					5	Std. Vel.		3.2K ~~3.6K~~
								3			
									~~Polaris~~		
224		2	F8Ib						Polaris	PMT seems down coming	4 K
											10.3K

P34 (47)

Date 1995 June 12/13 Observers [KK]/Tn/STn

Emulsion Batches:

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Comparison Exp.	Exp. Mtr
Ce 09824	HD 8890	01 22 34	88 46 26	03 25 51		-06 03 E			15s	350
25	Hg comp							Th A	1s	
26	HD 8890	01 22 34	88 46 26	03 30 82		-05 59 E			11s	265
27	comp							Th A	1s	
28	bias (4)			03 34						
29-35	flat (7)					~ 1 W	~ 35°		2s	

Spectr. Temp. ..... Dome Temp./Hum. 4.2°C / 55.5% Transparency Conditions ..... clear, good. seeing .....

Focus ..... 0.249 .....

Spectr. Temp. ..... -101.8°C ..... Dome Temp./Hum. +11.9°C 56% H

Head of night.

FULL MOON

48

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
152	300		2	F8 Ib	Echelle	300 l/mm 15790	60μ W 400μ H	6100 Å .225	4			4, 9 K
Is									3			
IM	268		2	F8 Ib					4			
Is									3			
									1			
2s							600μ H	.205	7			15K

All to Persons and left on CS5386. No warming.

Echelle Warm disk has no indication of any June Directory even though ~~some~~ it was made & some of Fri/Sat obs supposedly wrote to warm. (95-06)

pg #1 (49)

Date 1995 June 13/14 Observers EKK] Tn / STn

Emulsion Batches: .....

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Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Comparison Exp.
cc09336	Focus test								2s
37	inbound/outbound							ThA	2s
38	bias (4)			20 32 45					
39	comp							ThA	1s
40	HD 84441	09 40 11	24 14 05	20 38 22		04 11 W			506
41	comp							ThA	1s
42	comp							ThA	1s
43	Ceres	10 06 00	21 50 00	21 08 40		04 38 W			1586
44	comp							ThA	1s
45	comp							ThA	1s
46	HD 89484	10 14 28	20 20 51	21 38 23		04 32 W			170s
47	comp							ThA	1s
48	HD 89485	10 14 28	20 20 49	21 38 23		04 42 W			549s
49	comp							ThA	1s
50	HD 89484	10 14 28	20 20 51	21 53 38		04 49 W			284s
51	comp							ThA	1s

CCD
Spectr. Temp. −100°C ..... Dome Temp./Hum. 18.4°C / 58.6% Transparency Conditions ... hazy .....

Focus ..... 245 .....

Spectr. Temp. ... −100.6 °C .. Dome Temp./Hum. ... 17.5°C / 60.9% Full Moon.

50

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst. Echelle	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
				18.50	300 ln/mm @5790	60μ W 400μ H	6100 Å			EW slit	
								1			
								3			12K
			G1 II	(Ephemeraw)						offsets Δα -00 00 16	
207		2.98	G1 II	(Bright Stan Cat).				4	Std Vel	Δδ -00 01 39	6K
								3			
								3			
0		~88	G					5	Std Vel asteroid	> 30:1 SN	<100 ADU above bkg
								3			
								3			
143	3.4"	2.22	K0 III					6		NW and brighter of pair - look well separated	4K
								3			
66		3.47	G7 III					2		SE and fainter of pair	3K
								3			
36		2.22	K0 III					6	→ cloud ended	NW and fainter of pair in & out of cloud	2K
								3			

B2 (51)

Date 1995 June 13/14 Observers [KK] Tn / STn

Emulsion Batches:

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Comparison Exp.
ce 093 52	bias (4)			22 00					
53	comp							Th A	6
54	HD 8890	1 22 34	88 46 26	22 24 15		-10 57 E			187
55	comp							Th A	6
56	HD 8890	1 22 34	88 46 26	22 28 50		-10 51 E			~~237~~ 300
57	comp							Th A	6
58	HD 8890	1 22 34	88 46 26	22 34 45		-10 45 E			166
59	comp							Th A	6
60	comp							Th A	6
61	HD 138918	15 30 01	10 52 23	22 46 56		0 28 W			337
62	comp							Th A	6
63	HD 138917	15 30 01	10 52 19	22 55 05		0 46 W			900
64	comp							Th A	6
65	HD 138918	15 30 01	10 52 23	23 12 21		0 54 W			375
66	comp							Th A	6

Spectr. Temp. (CCD) ..-.10.1.6°C... Dome Temp./Hum. ...17.3°C/60.9% Transparency Conditions ...hazy..-.some..clouds...

Focus .....0.24.5.....

Spectr. Temp. ..... Dome Temp./Hum. ..16.9°C/.62.2%

Full Moon.

52

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst. Echelle	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
				18.50	300 l/mm @5790	60μ W 450μ H	6100 Å	1			
								3			
315		2	F8Ib					2	Polaris		8.6K
								3			
~~300~~		2	F8Ib					2	Polaris		15K
								3			
264		2	F8Ib					2	Polaris		8.6K
~~[illegible]~~								3			
								3			
123	~2"	4.20	F0IV					6	brighter south of pair	Bright and ~~north~~ WORTH of very well separated pair	2K
								3			
35		5.20	dF0					4		~~South~~ and Fainter of pair	1.5K
								3			11K
43		4.20	F0IV					6		or. ~~[illegible]~~ and north / pair	850
								3			11.6K

pg 3 53

Date 1995 June 13/14 Observers EKKJ, Tn / S.Tn

Emulsion Batches:
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.....

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Comparison Exp.
cc 09367	bias (4)			23 20					
68	comp							ThA	1s
69	HD 124 897	14 11 06	19 40 11	~~23 20 32~~ 23 37 22		2 35 W			129
70	comp							ThA	1s
71-77	flat (7)			23 49		2 37 W		TUNG	3s
78	BIAS (4)								

Spectr. Tem
Focus .....
Spectr Tem
Exp Mtr

Spectr. Temp. ..... Dome Temp./Hum. 16.7°C/62.2% Transparency Conditions ... hazy, ~~some~~ cloudy..

Focus ..... 0.245 .....

Spectr. Temp. ..... Dome Temp./Hum. 7/68°C ... 628

54

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst. Echelle	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
				18.50	300 l/mm ~~.5390~~	60 μW 400 μH	6100 Å	1			
								3			
96		0	K1.5 III					5	Std Vel	Thick Cloud	3K
								3			
								7			10K
								1		drive off, dome closed No Noise	
				All to Perseus and doubly exposed. No moon for a while							

PS1 55 Wed/Thurs

Date 1995 June 14/15 Observers [illegible] Th/STa

Emulsion Batches:

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Comparison Exp.
ce09379-80	inboard/outboard							ThA	2s/1.2s
81	bias (4)			20 41 00					
82	comp							ThA	1s
83	HD 84441	09 40 11	24 14 05	20 48 15		4 24 W			383
84	comp							ThA	1s
85	comp							ThA	1s
86	HD 89484	10 14 28	20 20 51	20 58 58		0350 W			154
87	comp							ThA	1s
88	HD 89485	10 14 28	20 20 49	21 03 51		04 06 W			487
89	comp							ThA	1s
90	HD 89484	10 14 28	20 20 51	21 13 21		04 W			212
91	comp							ThA	1s
92	Bias(4)			21 18					
93	comp							ThA	1s
94	Ceres	10 07 31	21 40	21 32 24		04 57 W			1073

Warm Room sl < 20°C at start

Spectr. Temp. CCD -100°C ..... Dome Temp./Hum. 19.5°C .. 44.0% H Transparency Conditions .Slight cloud / haze.....

Focus .....0.245.....

90 C gain

Spectr. Temp. ..... Dome Temp./Hum. 15.9°C .. 46.4% H

56

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst. Echelle	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
T = 17.5				18.50	300 l/mm 15790	60μ W 400μ H	6100 Å		focus test	0 0 128 1024 8 1 CCD Fmt	
					SLIT still EW			1		0 0 256 1024 4 1 CCD Fmt	
								3			11.6 K
174		2.98	G1 II G0 II	(Ephemeris) (Bright Star Cal)				4	Std Vel		5 K
								3			
								3			
165	4".5"	2.22	K0 III					5		NW & brighter of pair	
								3			
121		3.47	G7 III					6		SE & Fainter of pair - 5.0" separation	3.5 K
								3			
170	4".5"	2.22	K0 III					5		NW & brighter of pair	
								3			
								1			
								3			
0								2	Std vel asteroid	Epoch = J2000 ~ 25:1 Signal to noise	35 AU

57

Ⓐ pg42 wed / Thurs

Date 1995 June 14/15 Observers [illegible] T.o./S.T.o.

Emulsion Batches:

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Comparison Exp.	Spectr. Tem / Focus / Spectr Tem / Exc Mtr
ce09395	comp							Th A	1s	
96	Comp							Th A	1s	
97	ADS 9842 (A)	15 50 42	-01 54 00	22 01 12		slightly E			1355	9
98	comp							Th A	1s	
99	ADS 9842 (B)	15 50 42	-01 54 00	22 25 58		0 22 W			2216	0
400	comp							Th A	1s	
401	ADS 9842 (A)	15 50 42	-01 54 00	23 04 46		0 47 W			1375	0
402	comp							Th A	1s	
403	bias (4) ~~comp~~			23 36 11				~~Th A 1s~~		
404	comp ~~HD 137 909~~							Th A	1s	
405	HD 137 909	15 23 42	+29 27 01	23 39 47		01 39 W			696	250
406	Comp							Th A	1s	
407	HD 137 909	"	"	23 53 08		02 00 W			1157	360
408	Comp							Th Ar	1s	
409	HD 137 909	"	"	00 13 54		02 16 W			870	270
410	Comp							Th Ar	1s	

Spectr. Temp. -100. Dome Temp./Hum. 15.4°C / 46.2% H Transparency Conditions . . cleaning . . some . . cloud . . to south 58 AOD max

Focus . . . . . 0.245 . . . . . .

Spectr. Temp. . . . . Dome Temp./Hum. 13.7°C . . . 5008H getting windy with resulting bad seeing

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst. Echelle	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
				18.50	300 l/mm 15790	60μ 450μ	6100 Å	3			
								3			
4	4"	7.2						4	KK Vis Bin	brighter ◦ south ↑ pain - poor seeing	500
								3			
0		7.7						5		fainter ◦ NORTH ↑ pain - hard to see, poor seeing	70 AOD above sky
								3			
0	4"	7.2						4		brighter ◦ south ↑ pain (Hazy now)	≈300
								3			11.8K
								~~3~~ 1		CCDT = -101.5°C	
								3	~~BC~~		
200	6"	3.66	Fp					2	BC KK pgm		2.5K
								3			
360	5-8"	3.66	Fp					2			~~4K~~ 4.2K
								3			12.2K
270	6"	3.66	Fp					2			3.1 K
											12.4 K

pyH3 (59) Wed / Thurs

Date 1995 June 14/15 ... Observers [illegible] ... Tu / 5 Th .....

Emulsion Batches:

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Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Comparison Exp.	Exp. Mtr
ce 09411	bias (4)			00 30 06						
12	comp							Th A	1s	
13	HD 8890	01 22 34	88 46 26	00 36 26		-08 37 E			437	354
14	comp							Th A	1s	
15	HD 8890	01 22 34	88 46 26	00 46 10		-08 30 E			310s	350
16	comp							Th A	1s	
17	HD 8890	01 22 34	88 46 26	00 55 02		-08 20 E			407	398
18	comp							Th A	1s	
19	comp							Th A	1s	
20	HD 161 096	17 38 32	04 36 32	01 11 12		0 53 W			595	593
21	comp							Th A	1s	
~~22~~	~~comp~~							Th A	1s	
23	HD 187 691	19 46 14	10 09 55	01 28 52		-0 39 E			157	48
24	comp							Th A	~~1s 157~~	~~48~~
25	bias (4)			01 58 ~~47~~ 29						
26	comp							Th A	1s	

Spectr. Temp. ..... Dome Temp./Hum. 13.4°C 50.7% Transparency Conditions . Mostly Clear .....

Focus ..... 6.245 .....

Spectr. Temp. ..... Dome Temp./Hum. ..... Cumbola

60

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst. Echelle	Grating/ Tilt	Slit	~~Emulsion~~	P.H.	Program	Remarks	Quality
				18.50	300 l/mm 15790	60μ 450μ	6100Å	1			
								3			
354	5"-8"	2	F8Ib					4	Polaris	poor seeing	6.3K
								3			
350		2	F8Ib					4	Polaris		7.5K
								3			9.8K
398		2	F8Ib					4	Polaris		
								3			
								3			12.3K
293		2.77	K2III	CN0.5				5	Std Vel		7K
								3			
								3			
48		5.11	F8V					6	Std Vel		2K
~~48~~								3			
								1			
								3			

pg #4 61

Date 1995 June 14/15 Observers [KK] To / STo

Emulsion Batches:

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Comparison Exp.
ce 09427	HD 177724	19 04 04	15 51 12	02 04 19		022 W			420
28	Comp							ThA	1s
29	Comp							ThA	1s
30	HD 197964 (B)	20 42 01	15 45 50	02 36 54 ~~02 47 47~~		-057 E ~~056 E~~			945 ~~955~~
31	Comp							ThA	1s
32	HD 197963 (F)	20 42 00	15 45 49	02 54 35		-015 E			1191
33	Comp							ThA	1s
34	HD 197964 (B)	20 42 01	15 45 50	03 16 07		0 0 W			863
35	Comp							ThA	1s
36	bias (4)			033239					
37-43	flat (7)			0335		00 04W	+16 07	TiNG	2s
44/45	inboard / outboard Hartmann					2 55W	+16	ThA	~~25 12s~~ 1'55 ~~20~~

Spectr. Temp. ..... Dome Temp./Hum. 13.0°C 54.5% H Transparency Conditions ... mainly clear .....

Focus ..... 0.245 .....

CCD
~~Spectr.~~ Temp. ~101.8°C ..... Dome Temp./Hum. 12.7°C 57.6% H

62

clamshell

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst. Echelle	Grating/ Tilt	Slit	~~Emulsion~~	P.H.	Program	Remarks	Quality
216		2.99	AOV$_n$	18.50	300 l/mm 15.90	60μ 400μ	6100 A	2	Std Vel		3.4K
						400a H=.225		3			
								3			
~~123~~ 171	5"	4.5	K1 IV					5		Brighter ∘ East ◁ pair	4.6K
								3			
85		5.5	F7V					~~3~~ 4		Fainter ∘ west ◁ pair	2K
								3			
156		4.5	K1 IV					5		Brighter ∘ East ▷ pair	4.1K
								1			
						600a H=.205		7			15.4
+12.6°C						400a H		1/2	focus test	CCD ENTT 00 138 1034 51	
									[we had gone through idea temp for this set]		
						All to Release only					

Pg #1

63

Date 1995 June 15/16 Observers Km / Smt

Emulsion Batches:
06.560 FILTER IN
STELLAR BEAM

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Comparison Exp.	Exp Mtr
cc33459/60	INBOARD/OUTBOARD			23 00				FeAr clear	1/2	
61	BIAS(4)			23 40						
62	COMP							FeAr clear	1	
63	HD126327	14 19 42	+26 11	23 44 12		2 40 W			50	750
64	COMP							FeAr clear	1	
65	COMP							"	1	
66	HD123782	14 04 33	+49 55 50	23 57 18		~3 08 W			30	830
67	COMP							"	1	
68	COMP							"	"	
69	HD141850	15 46 05	+15 26 14	0 ~~01 00~~ 10 29		01 41 W			148	300
70	COMP							FeAr clear	1	
71	COMP							FeAr clear	1	
72	HD188350	19 49 38	+00 00 44	0 23 00		02 11 E			124	502
73	Comp							"	1	
74	comp							"	1	
75	HD146051	16 09 06	-03 26 13	0 34 51		01 40 W			3	

CCD
Spectr. Temp. -100.4°C Dome Temp./Hum. 16.1°C / 50% FOCUS TEST Transparency Conditions ..clear.....

Focus .....6.74.....

Spectr. Temp. ..... Dome Temp./Hum. .....

64

445 0 50 1024 4 1 ccdfast

Exp. Mtr.	Seeing	V Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
1/2				CASS CCD	150 gl/mm G=2553	230μ	7500Å	3/4	FOCUS TEST	xc-normalized telescope after focus test and attempt to find star with bad encoder coords.	
							±5Å (very close)	1			
1	~~[illegible]~~							5			
50	~~[illegible]~~ 750	T.0 -9.1	+M7.5 -M8					6	Km	saturated on a few attempts before this one - trailed	14.5K
1								7			
1								8			
30	800	V 5.25	M2IIIab					9	Std. Vel.		14.5K
1								10			
								11			
1	~~[illegible]~~ 500	V 5.16~14.4	MTIIIe (Mira)					12		saturated on first attempt	
								13			
1								##			
1	502	V 5.61	A0III					15	flux std.		
1								16			
								17			
3	500	2.75	M0.5III					18			

pg # 2 65

Date 1995 June 15/16 Observers Km/Smt

Emulsion Batches:
GG 560 FILTER IN
STELLAR BEAM

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Comparison Exp.	Exp. Mtr
cc 33476	HD 146051	16 01 06	-03 26 13	00:39 57		01 44 W			5	2700
77	comp							FeAr Clear	1	
78	comp							"	1	
79	HD 167006	18 08 08	+31 22 49	00:51:15		-01 40 E			15	520
80	Comp							"	1	
81	comp							"	1	
82	HD 168720	18 16 04	+21 55 08	01:00:10		-00 01 E			19	530
83	"	"	"	01 01 44		+00 01 W			19	530
84	comp							"	1	
85	BIAS (4)			01 05 40						
86	Comp							"	1	
87	HD 188350	19 49 37	00 00 44	01 13 15		-01 20 E			102	536
88	comp							"	1	
89	comp							"	1	
90	HD 172171	18 33 34	08 44 48	01 24 49		0 08 W			160	590
91	COMP							"	1	

CCD

~~Spectr.~~ Temp. -99.7°C ..... Dome Temp./Hum. 15.6°C / 49.5% Transparency Conditions . a little hazy. Moon just full moon rising

Focus ..... 6.74 .....

Spectr. Temp. ..... Dome Temp./Hum. .....

FANS OFF

~~145~~ 0 50 1024 4 1 ccdfast

66

Exp. Mtr.	Seeing	V ~~Pte.~~ Mag.	Sp.	Inst.	Grating/ Tilt	Slit	~~Emulsion~~	P.H.	Program	Remarks	Quality
500		2.75	M0.5 III	CASS CCD	150 l/mm G=2553	230μ	7500Å ± 5Å	19	Km		
								20			
								21			
520		4.97	M3 III					22			
								23			
								24			
530		4.96	M1 III					25			
530		4.96	M1 III					26			
								27			
								1/2			
								28			
536		5.61	A0 III					29	FLUX Std.		
								30			
								5			
530		5.9 ~9.2	M6 III e + K1 III					6			145K
								7			

PG #3 67

Date 1995 June 15/16 Observers Km/Smt

Emulsion Batches:
OG 560 FILTER IN
STELLAR BEAM

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Comparison Exp
cc33492	COMP							FeAr clear	1
93	HD177724	19 00 49	+13 42 53	1 41 03		0 05 E			19
94	COMP							"	1
95	BIAS(4)			1 45					—
96	COMP							"	1
97	HD177940	19 01 33	+8 04 43	~~51 31~~ ~~48 38~~ C 1 52 55		0 06 W			29
98	COMP							"	1
99	COMP							"	1
cc33500	HD187796	19 46 43	+32 39 40	2 08 05		0 23 E			15
01	COMP							"	1
02	COMP							"	1
03	HD188350	19 49 37	+0 00 44	2 17 12		0 16 E			120
04	COMP							"	1
05	COMP							"	1
06	HD179820	19 08 54	+2 26	2 28 54		0 38 W			235
07	COMP							"	1

Spectr. Temp. ..... Dome Temp./Hum. 15.5°C / 49% Transparency Conditions .. a little hazy down low still full moon is up

Focus ..... 6.74 ..... FAPS OFF (68)

Spectr. Temp. ..... Dome Temp./Hum. ..... 445 0 50 1024 4 1 ccdfast

Comparison Filter Exp	Exp. Mtr.	Seeing	V ~~Reg.~~ Mag.	Sp.	Inst.	Grating/ Tilt	Slit	~~Emulsion~~	P.H.	Program	Remarks	Quality
					CASS CCD	150 ℓ/mm G=2553	234μ	7500Å	8			
	900		2.99	AOVn					9	Telluric Std.	moved star all over slit then pulled off to readout	
									10			
									1/2			
									11			
	~~520~~	3"	5.5 ~12.0	M5e ~M9e					12	Km Mira	moved it around on 3-x attempt	~16K
									13			
									14			
	~1200		3.3 ~ 14.2	S6.2e ~S10.4e					15	Km Mira	many attempts to get one peak across rows	
									16			
									17			
	600		V 5.61	AOIII					18	Flux Std.		~8K
									19			
									20			
	520		V 9.2 ~	M6+III					21	Km		
									23			

pg #4 69

Date 1995 June 15/16 Observers Km/Smt

Emulsion Batches:
06.56Q FILTER IN
STELLAR BEAM

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Comparison Exp	Exp Mtr
cc33508	COMP							Fe Ar clear	1	
09	HD184313	19 28 48	+5 15	2 39 29		0 26 W			34	
10	COMP							"	1	
11	BIAS(4)			2 43					—	
12	COMP							"	1	
13	HD196610	20 33 21	+17 55	2 ~~48 46~~ 50 38		0 27 E			20	
14	COMP							"	1	
CG41022-25	HD195047 x4	20 23 54	+47 35			0 01 E			.067	
26/27	" x2				3 06	↓	86° Alt	1.0025 air mass	.133	
cc33515	COMP							Fe Ar clear	1	
16	HD188350	19 49 37	+0 00 44	3 14 34		0 41 W			99	
17	COMP							"	1	
18	COMP							"	1	
19	HD214665	22 34 42	56 16 34	03 ~~36~~ 26		-01 ~~42~~ E			~~[illegible]~~ 13	
20	COMP							"	1	

Spectr. Temp. -101.7°C Dome Temp./Hum. 15.3°C/49.2% Transparency Conditions . clear, full moon, high up, dew...

Focus 6.74 FANS OFF 70

Spectr. Temp. ..... Dome Temp./Hum. 15.2°C/49.5% @ seeing test 445 0 50 1624 4 1 ccdfast

Exp. Mtr.	Seeing	V ~~Mag.~~ Mag.	Sp.	Inst.	Grating/ Tilt	Slit	~~Emulsion~~	P.H.	Program	Remarks	Quality
				CASS CCD	150 ℓ/mm G=2553	230μ	7500Å	24			
100		6.3 -6.9	M5 a M5.5III					25	Km	not saturated though	~16K
								27			
								1			
								28			
~100		6.3 var	+M6III					29	Km	moved it around.	10K
								30			
	3"	7.9	G5III	EEV CCD IV GUIDER		above 230μ		—	SEEING TEST	Done NW, no wind, clear Moon is @ meridian & bright!	
		"	"					—		60% outside humidity	
				CASS CCD				17			
539		5.61	A0III					18	Flux Std.		
								19			
								20			
~~330~~ 445		5.5:	M4+ III					21		first exp. saturated	
								23			

pg #5 (71)

Date 1995 June 15/16 Observers Km/Smt

Emulsion Batches:
06 560 FILTER
IN STELLAR BEAM

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Comparison Exp.
cc33521	comp							FeAr clear	1
22	HD202012	21 08 13	+68 05	3 49 06		0 0 0			60
23	COMP							FeAr clear	1
24	BIAS(4)			3 53					-
25-33	FLAT x 9					0h	+42°	Tung ✱ 1/8 Ap	5
34/35	INBOARD/OUTBOARD					"	"	FeAr clear	1/2

Spectr. Temp. ...-100.3°C... Dome Temp./Hum. 15.7°C / 46.2% Transparency Conditions clear, bright moon, sun coming up → bright in NE

Focus .....6.74.....

Spectr. Temp. ..... Dome Temp./Hum. .....

72

Exp. Mtr.	Seeing	V ~~Pkg.~~ Mag.	Sp.	Inst.	Grating/ Tilt	Slit	~~Emulsion~~	P.H.	Program	Remarks	Quality
				CASS CCD	150 l/mm G=2553	2"x30"	7500Å	24			
510	2"	5.2 ~11.3	M5.5e - M8.8e					25		saturated on 1st object	~16K
								26			
								1			
								2		* OG 560 FILTER IN TUNGSTEN BEAM	~13K
								3/4		T= 15.0°C, set warm at 6.74	

All to Perseus only

Pg #1 (73)

Date 1995 June 16/17 Observers Bln / Smt

Emulsion Batches:

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Comparison Exp.
CC33536/37	INBOARD/OUTBOARD							FeNe clear	30/45
38	BIAS (4)			21 34					—
CG41028-31	HD135891 x4	15 12 30	+37 26						.067
32/33	" x2				21 51	0 03 E	83° Alt	1.0071 airmass	.133
CC33539	COMP							FeAr clear	90
40	SKY			22 01 06		$0^h 0^m$	+44°		1800
41	SKY			22 32 41		"	"		1800
42	SKY			23 03 02		"	"		1800
43	COMP							FeAr clear	90
44	BIAS (4)			23 43					—
45-47	FLAT x3							Tung clear	4
48/49	INBOARD/OUTBOARD							FeNe clear	20/40
50	BIAS (4)			0 14					—
51	COMP							FeAr clear	60
52	SKY			0 18 49		$0^h 0^m$	+44°		1800

CCD Spectr. Temp. −99.7°C Dome Temp./Hum. 20.5°C/40.8% @ FOCUS TEST Transparency Conditions .. fine., b.t.d. haze., hazy.

Focus 6.68 Dome Temp./Hum. 19.9°C / 41.8% @ SEEING TEST N FAN ON ONLY 74

Spectr. Temp. ..... 410 0 50 1024 4 1 ccdfast

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	~~Emulsion~~	P.H.	Program	Remarks	Quality
				CASS CCD	1800 l/mm G=4980	306μ	5070 Å	3/4	FOCUS TEST		
								1			
	2"	7.08	F8V	EEV CCD TV GUIDER		above 306μ		—	SEEING TEST	Done SW, no wind, hazy, S fan just turned off before setting 2 = star,	
								—	"		
				CASS CCD	1800 l/mm G=4980	306μ	5070 Å	5		Done ~~[illegible]~~ just slightly N of W increasing haze	
165								6	B1n		
								7	"	Moon rising but shrouded by thick haze → cloud.	
365								8	"		
								9			
								1			
								16			15.6K → 16.0K
				CASS CCD	1800 l/mm G=4851	306μ	~~5070 Å~~ 4882 Å ±2 Å	11/12	FOCUS TEST	in focus still. T = 18.8°C	
								1			
								13			
144								14		Still thick haze → thinning ~~[illegible]~~ ng features blue of the overlay feature at red end.	

Pg #2 June 16/17 (75)

Date 1995 ..... Observers Bln/Smt .....

Emulsion Batches:
.....
.....
.....

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Comparison Exp.
cc33553	SKY			0 55 20		$0^h\ 0^m$	$+44^\circ$		1800
ABORTED	~~SKY~~			1 28 09		"	"		1800
54	COMP							Fe4r clear	60
55	BIAS(4)			1 47					—
56-58	FLAT x 3							Tung clear	6
59	COMP							Fe4r clear	60

Spectr. Temp. ..... Dome Temp./Hum. 18.3°C/50.9% Transparency Conditions ..clear..now.....

Focus .....6.6.8.....

Spectr. Temp. ..... Dome Temp./Hum. .....

76

N FAN ON
410 0 50 1024 4 1 ccdfast

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	~~Emulsion~~	P.H.	Program	Remarks	Quality
144				CASS CCD	1800 ℓ/mm G=4851	306μ	4882Å	15	B/n	no substantial	
								16		RESET CSS 386 MANY TIMES, THEN RESET HEURIKON	
								3			
								1			
								4			~15K
				CASS CCD	831 ℓ/mm G=3159	250μ	4847Å	1	B/n	for future reference	

All to Persons Only

pg#1 (77)

Date 1995 June 18/19 Observers Km/Smt

Emulsion Batches:
06.560 IN STELLAR.
R.60 IN COMP

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Comparison Exp.
CC 33560/61	INBOARD/OUTBOARD							Fetr clear	1/2
62	BIAS(4)			22 07					—
63	COMP							"	1
64	HD129956	14 40 25	+1 08 22	22 09 57		0 58 W			127
65	COMP							"	1
66	COMP							"	1
67	HD108849	12 25 18	+4 58 00	22 30 47		3 33 W			80
68	COMP							"	1
69	comp								1
70	HD129956	14 40 25	+1 08 22	23 40 26		~2 40 W			200
71	comp							"	1
72	BIAS(4)			23 47					—
73	comp							"	1
74	HD123782	14 08 0	+49 8 4	23 57 02		3 21 W			90
75	COMP							"	1

CCD
Spectr. Temp. ..-100.°C..... Dome Temp./Hum. 25.0°C/61.5% Transparency Conditions ..hazy, thin cloud.....
@ FOCUS TEST
Focus .....6.6.2..... BOTH FANS ON (78)
Spectr. Temp. ..... Dome Temp./Hum. .....

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	~~Emulsion~~	P.H.	Program	Remarks	Quality
				CASS CCD	150 l/mm G=2556	230μ	7474 Å	3/4	FOCUS TEST	445 0 50 1024 4 1 ccdfast	
							± 3 Å	1		430 0 50 1024 4 1 ccdfast	
								5			
550	2"	V 5.69	B1.5V					6	Km ~~Sp.~~ Std		MSK
								7			
								8			
390	4"	V 7.1-8.7	M7-III					9	Km	moved star around	8.1K
								10			
								11		lost dec S motion (slew)	
~~1030~~ 704								12			
								13		secure and saving	
								1			
								14			
400	3"	V 5.25	M2III ab					15	Std Vul.		10K
								16			

pg # 2 79

Date 1995 June 18/19 Observers Km/Smt

Emulsion Batches:
06.560 FILTER IN STELAR
R.60 " " COMP

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Comparison Exp.
CC33576	COMP							Feb clear	1
77	HD141477	15 44 14	+18 27 01	0 07 39		1 51 W			69
78	COMP							"	1
79	COMP							"	1
80	HD151061	16 39 54	-2 54	0 17 55		1 06 W			95
81	COMP							"	1
82	COMP							"	1
83	HD154143	16 58 33	+14 14 09	0 28 34		0 59 W			168
84	COMP							"	1
85	COMP							"	1
86	HD156014	17 10 05	+14 30 15			01 01 W			20
87	"	"	"	0 43 37					20
88	COMP							"	1
89	BIAS(4)			0 47					-
90	COMP							"	1

Spectr. Temp. -10.5°C Dome Temp./Hum. 24.1°C/62.2% Transparency Conditions Thin cloud 80

Focus 6.62

Spectr. Temp. ..... Dome Temp./Hum. .....

FANS OFF, OOPS

430 0 50 1024 4 1 ccdfast

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
				CASS CCD	150 l/mm G=2556	230μ	7474Å	17			
760		V 4.10	+M0.5 III a b					18	Km		10K
								19			
								20			
450		V 7.25	M5III ~5.5III b					21	Km		13.5K
								22			
								23			
400	3"	V 4.98	M3-III					24	Km	Thicker cloud here	10K
								25			
								26			
1200 ~~450~~		3.1-3.9	M5 I -II					27	Km	Small companion to E on slit moved star around.	~16K
~200		"	"					28		took companion off slit	
								29			
								1			
								30			

PM #3 81

Date 1995 June 18/19 Observers Km / Smt

Emulsion Batches:
06 560 FILTER IN STELAR
R60 " " COMP

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Comparison Exp.
cc33591	HD164058	17 54 17	+51 30 02	1 05 35		0 40 W			10
92	COMP							FeAr clear	1
93	COMP							"	1
94	HD175588	18 51 00	+36 46 17	1 22 11		0 01 E			20
95	COMP							"	1
CG41034-7	HD176844 x4	18 57 03	+40 32 36						.067
38/39	" x2				1 43 33	0 14 W	86° Alt	air mass 1.0025	.133
cc33596	BIAS(4)			1 48					—
97	COMP							FeAr clear	1
98	HD142143	15 47 48	+48 47	1 58 33		3 39 W			60
99	COMP							FeAr clear	1
cc33600	COMP							"	1
01	HD188350	19 49 37	+0 06 44	2 08 45		~~00~~ 03 E			124
02	COMP							"	1
03	COMP							"	1
04	HD207076	21 46 36	~~+0 09~~ -02 12	2 32 19		-01 34 E			515

Spectr. Temp. -100°C Dome Temp./Hum. 23.6°C/62.2% Transparency Conditions partly cloudy 82

Focus 6.62 Dome Temp./Hum. 23.4°C/62.2% @ seeing test N DOME FAN ON

Spectr. Temp. 430 0 50 1024 4 1 ccdfmt

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
1800		V 2.23	K5III	CASS CCD	150 l/mm G=2556	230μ	7474Å	31	Km	moved star around	10K
								32			
								8			
880	3"	V 4.30	M4III					9	Km	moved it around another star NW in finder but probably not the right one.	9K
								10			
	3"	V 6.65	M2III	EEV CCD TV GUIDER		above 230μ		—	SEEING TEST	Dome W, medium W wind mostly cloudy now except overhead.	
		6.65	"	"				—	"		
				CASS CCD				1			
								11			
210	3"	V 6.8 -8.5	M6.5 - M7.5III					12	Km		9.5K
								13			
								14			
497		5.61	A0III					15	Sp. std *		
								16			
								17			
302		6.4-6.8	M7III					18			

pg #4 83

Date 1995 June 18/19 Observers Km/Smt

Emulsion Batches:
06. 560. FILTER IN STELLAR
R 60 " " COMP

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Comparison Exp.	Spectr Tem / Focus / Spectr. Tem / Exp. Mtr
cc33605	comp							FeAr clear	1	
06	COMP							"	1	
07	HD206330	21 36 16	+42 49 11	2 54 13		1 14 E			60	520
08	COMP							"	1	
09	BIAS (4)			2 58					—	
10	COMP							"	1	
11	HD188350	19 49 37	+0 00 44	3 10 25		0 53 W			360	700
12	COMP							"	1	
13	COMP							"	1	
14	HD206936	21 40 27	+58 19 17	3 35 32		0 36 E			10	700
15	COMP							"	1	
16	COMP							"	1	
17	HD202380	21 10 18	+59 42	3 45 45		0 05 W			60	520
18	COMP							"	1	
19	BIAS (4)					0h	+40°		—	
20-28	FLAT x9					"	"	Tung* Dp	5	

Spectr. Temp. ....101.5°C.... Dome Temp./Hum. ~~22.6°C~~/65.3% Transparency Conditions .mostly cloudy..thin thruout..

Focus .....6r.62.....

Spectr. Temp. ..... Dome Temp./Hum. .....

FANS OFF

430 0 50 1024 4 1 coadd

84

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	~~Emulsion~~	P.H.	Program	Remarks	Quality
				CASS CCD	150 ℓ/mm G_0=2556	230μ	7474 Å	19			
								20			
520		V 5.10	M1 III ab					21	Km		
								22			
								1			
								23			
1000	5"	V 5.61	A0 III					24	Sp. Std	Seeing getting bad.	12.5K
								25			
								26			
2000		V 4.08	+M2 Ia					27	Km		10K
								29			
								30			
520		V 7.0	M2 Ib					31	Km	Sky getting bright.	15K
								32			
			All backed up to Persens				ONLY	1			
								2		* OG 560 FILTER IN FOR FLATS	13.5K

Pg #1 (85) Tues/Wed

Date 1995 June 20/21 Observers [KK] Tn/Smt

Emulsion Batches:

30 (gain)

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Comparison Exp.
CC3362 29/30	inboard/outboard					=0 0	=+46°	FeNe Clear	15/30
31	BIAS(4)			21 05					—
32	Comp							FeNe clear	20
33	HD125162	14 ~~14~~ 12 35 ~~27~~	+46 ~~49~~ 32 51 ~~00~~	21 07 50		0 39 W			445
34	COMP							"	20
35	COMP							"	20
36	HD125161	14 12 37	+51 49 42	21 22 ~~23~~		0 58 W			850
37	COMP							"	20
38	BIAS(4)			21 39					—
39	Comp							"	20
40	HD106251	12 08 20	+10 49 08	21 47 24		3 33 W			1236
41	Comp							FeNe Clear	20
42	Comp								
43	HD106591	12 10 29	+57 35 ~~18~~	22 15 ~~47~~		3 42 W			218
44	Comp							FeNe Clear	20

CCD
Spectr. Temp. −100°C ..... Dome Temp./Hum. +21.7°C ... 19.4% H Transparency Conditions .... Hazy, slightly improving (86)

Focus .... 6.70 ..... 30 Cgain

Spectr. Temp. ..... Dome Temp./Hum. +20.7°C ... 50.8% H Lambda

430 0 50 1024 4 1 ~~1~~ MAX

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	~~Emulsion~~	P.H.	Program	Remarks	ADD ~~Quality~~
BG39 Filter				CASS CCD	600 l/mm G=2640	230u	4150Å	3/4	focus test	set cool but T will drop	
								1		CSS 386 CLOCK IS >10 SEC ~~FASTER~~ AHEAD OF WWV	
								5			2.1K
10K	4-5"	V 4.25	A0p					6	kk A*		10.5K
								7			
								8			
10.8K	4"	V 4.75	A7V					9	kk A*		12.5K
								10			
								1			
								11			
4.2K	4"	B= 6.06	A2m					12	KK A*		13K
								13			
								14			
10K	3-5"	B 3.39	A3V					15	kk A*		15K
								16			2.2K

pg 2 87 Tues/Wed

Date 1995 June 20/21 Observers [KH] Jn. /Sril

Emulsion Batches:

30 again

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Comparison Exp.
CG41040-3	HD144579 x4	16 01 30	+39 25 36						
44/45	" x2				22 31	0 04 W	85° Alt	corr mag 1.0035	
CC33645	BIAS(4)								—
46	COMP							FeNe clear	20
47	HD144579	16 01 30	+39 2536	22 36 24		0 25 W			930
48	COMP							"	20
49	COMP							"	20
50	HD141795	15 45 50	+4 46 43	23 01 44		0 56 W			360
51	COMP							"	20
52	COMP							"	20
53	HD155125	17 04 39	-15 36 04	23 23 31		0 05 E			180
54	COMP							"	20
55	BIAS(4)			23 30					—
56	Comp							FeNe Clear	20
57	HD157792	17 2016	-240500	23 35 34		0 03W			931
58	Comp							FeNe	20

CCD
Spectr. Temp. -100.5°C Dome Temp./Hum. 20.4°C/51.4% Transparency Conditions ... clear with haze

Focus ... 6.70 @ seeing test 88

Spectr. Temp. ... Dome Temp./Hum. ... 4300 5a 1024 4 1 ccdat

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	~~Emulsion~~	P.H.	Program	Remarks	Quality
	5"	G8 I	6.66	EEV CCD TUGULDER		above 230μ			Seeing tests	Dome SW, lite ESE wind, haze on horizon	
									"	N FAN ON ONLY	
36, 39 FILTER				CASS CCD	600 l/mm G=2640	230μ	4150Å	1		CSS 386 CLOCK NOW 3 SEC BEHIND WWV	SEC
								17			
1585	4.5	G8 I	6.66					18	raw ~~Std~~ Std. Vel		1.7K
								19			
								20			
10.4K		V 3.73	A2m					21	KK A*		11K
								22			
								23			
10.7K	5"	B 2.49	A I V C-A3V					24	KK A*	can't resolve image into A & BC	8K
								25			
								1			
								26			
8.4K	6"	~~B~~ 4.46	A9 V					27	KK A*		5K
								28			2K

Pg # 89 Tues/Wed

Date 1995 June 20/21 Observers [kk] Tn / Smt

Emulsion Batches:

30 (gain)

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Comparison Exp.
cc 33659	HD157792	17 20 16	-24 05 00	23 53 46		0 26 W			120s
60	Comp							FeNe Clear	20s
61	Comp							"	"
62	HD159561	17 30 18	+12 37 58	00 20 53		0 25 W			110s
63	Comp							FeNe Clear	20s
64	Comp							"	"
65	HD156164	17 10 55	+29 57 25	00 31 38		0 58 W			199
66	Comp							FeNe Clear	20s
67	Bill5(9)			00 37					
68	Comp							FeNe Clear	20
69	HD165777	18 02 37	+9 32 58	00 43 10		0 20 W			360
70	COMP							FeNe Clear	20
71	COMP							"	20
72	HD177724	19 00 49	+13 42 53	0 57 55		0 26 E			
73	COMP							"	20

Spectr. Temp. -100 °C ..... Dome Temp./Hum. +18.7°C 60%RH Transparency Conditions ... slightly hazy ... 90

Focus ..... 6:7.0 ..... 30 C gain

Spectr. Temp. ..... A ..... Dome Temp./Hum. ..... 430 0 50 1024 A 1 CCOFMT

Exp. Mtr. BG 39	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	~~Emulsion~~	P.H.	Program	Remarks	Quality
9.9K	6"	B 4.46	A9 V	CASSCCD	600 l/mm G=2690	230u	4150 Å	27	kk A*	Aggregate exposure	7.5K
								28			9.2K
								29			
12K		B 2.23	A5 III					30	kk A*		10K
								5			
								7			
10K		B 3.22	A3 IV					8	kk A*	Faint companion due west 10"	10K
								10			2-1
								1			
								11			
10.7K	7"!	B 3.82	A4 V					12	kk A*	Seeing just went horrible for this exposure	11K
								13			
								14			
11K	5"	B 2.99	A0 Vn					15	kk A*		13.4K

pg #4 (91)

Date 1995 June 20/21 Observers [KK] Tn/Smt

Emulsion Batches:

30 again

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Comparison Exp.
cc33674	COMP							FeNe clear	20
75	HD187642	19 45 54	+8 36 15			1 03 E			20
76	COMP							"	20
77	COMP							"	20
78	HD172167	18 33 33	+38 41 26	01 20 30					10
79	"			01 21 56					10
80	"			01 24 12		0 26 W			10
81	COMP							FeNe clear	20
82	BIAS (4)			1 30					—
83	COMP							"	20
84	HD182640	19 20 27	+2 54 55	1 36 10		0 06 E			240
85	COMP							"	20s
86	Comp							"	"
87	HD200499	20 58 43	−20 15 01	02 04 44		0 58 E			1350
88	Comp							"	20

Spectr. Temp. -100 °C Dome Temp./Hum. 18.2°C / 55.0% Transparency Conditions ... clear

Focus ... 6.70

Spectr. Temp. ... Dome Temp./Hum. ...

92

430 0 50 1024 4 1 ccdfmt

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
				CASS CCD	600 ℓ/mm G=2640	230μ	4150Å	17			
12.7K		B 0.99	A7 IV-V					18	KK A*	moved star around to spread out the signal	7K
								19			
								20			
13.7K		B 0.00	A0 V					21	KK Vega	see above remark	6K
17.7K		"	"					22	KK "	"	8.4K
13.0K		"	"					23	KK "	"	6.6K
								25			
								1			
								26			
9.3K	4"	B 3.68	F0 IV					27	KK A*?	close enough to A-type to be called one	8.5K
								28			
								28			
7550	6"	B 4.98	A5 V					29	KK A*		7.0K
								31			

Pg #5 93

Date 1995 June 20/21 Observers [KK] Tn/Smt

Emulsion Batches:

~~3~~ 30 again

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Comparison Exp.
cc33689	BIAS(4)			2 30					—
90	COMP							FeNe clear	20
91	HD201184	21 02 50	-21 35 44	2 39 29		0 23 ~~E~~			1560
92	COMP							"	20
93	COMP							"	20
94	HD207098	21 41 31	-16 34 52	3 12 07		0 51 E			300
95	COMP							"	20
96	BIAS(4)			3 20					—
97	COMP							"	20
98	HD210418	22 05 09	+5 42 21	3 23 44		1 02 E			280
99	COMP							"	20
cc33700	COMP							"	"
01	HD212061	22 16 30	-1 53 29	3 33 58		1 07 E			400
02	COMP							"	20
03-11	FLAT x 9					6'50" E	-1° 30'	Tung clear	11
6/13	Inward / Outward Hartman					0 0	+23°	FeNe	45/30

CCD
Spectr. Temp. ...-100..... Dome Temp./Hum. 17.5°C/53.7% Transparency Conditions ...clear, no moon 42°C...

Focus .....6.70.....

CCD
Spectr. Temp. ...-104.6°C.... Dome Temp./Hum. 17.0°C/53.7%@ FOCUS TEST

94

430 0 50 1024 4 1 ccdfast

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	~~Emulsion~~	P.H.	Program	Remarks	Quality
				CASS CCD	600 l/m 6=2640	230μ	4150Å	1			
								5			
5750	6"	V 5.27	AOV					6	kk A*		4.4K
								7			
								10			
10.4K	>6"	B 3.06	A6m					11	kk A*		9.0K
								12			
								1			
								13			
10.7K		B 3.61	A2V					14	kk A*	sky getting blue	13.0K
								16			
								17			
11.2K		B 3.78	AOV					18	kk A*	sky getting bright.	13.4K
								19			
								20			10.5K → 13.4K
	+/6mg	°C		set 6.70 still				3/4		wait through Ideal temp.	

pg # (95) Wed / Thurs

Date 1995 June 21/22 Observers [kk] Tn / Smt

Emulsion Batches:

30 cgain

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Comparison Exp.	Exp. Mtr
CC337 A/B	INBOARD/OUTBOARD							FeNe clear	15/30	1/2 of FILM
16	Comp							FeNe clear	20	
17	HD125162	14 12 35	+46 32 51	20 50 01		0 22 W			386	9K
18	COMP							"	20	
19	BIAS(4)			20 59					—	
20	COMP							"	20	
21	HD102647	11 43 58	+15 07 52	21 07 07		3 02 W			90	9K
22	COMP							"	20	
23	COMP							"	"	
24	HD97603	11 08 47	+21 04 18	21 15 24		3 46 W			154	9K
25	COMP							"	20	
26	COMP							"	"	
27	HD87696	10 01 32	+35 43 56	21 26 43		5 18 W			917	9K
28	COMP							"	20	
29	BIAS(4)			21 45					—	

CCD
Spectr. Temp. ..−100°C..... Dome Temp./Hum. .+20.6°C...45.6% Transparency Conditions .Hazy.....

Focus ..*6.70.....

Spectr. Temp. ..... Dome Temp./Hum. ..... c Lambda 430 0 50 1074 4 1 ccdfast

96

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
Pg 39 FILTER				CASS CCD	600 ℓ/mm(I) G=2640	230μ	4150B	3/4	focus fast	*Lines 4411	
								5			
9K	3"	V 4.25	AOp					6	kk A*		14.8K
								7			
								1			
								8			
9.1K		B 2.23	A3V					9	kk A*		19.2K
								10			
								11			
10.9K	3"	B 2.68	A4V					12	kk A*		15.6K
								13			
								14			
10.0K	2"-3"	B 4.66	A7V					15	kk A*		15.0K
								16			
								1			

pg #2 (97 Wed / Thurs

Date 1995 June 21/22 Observers [KK] Tn/Smt

Emulsion Batches:
30 cgain

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Comparison Exp.
cc33730	COMP							FeNe clear	20
31	HD118098	13 29 36	-0 05 05	21 49 57		2 05 W			420
32	COMP							"	20
33	COMP							"	20
	~~HD130841~~	~~14 45 21~~	~~-15 37 34~~	ABORTED	DUE TO SPEC CONTROLLER FAILURES				
34	HD125162	14 12 35	+46 32 51	22 24 40		1 56 W			396
35	Comp								
36	BIAS(4)			22 31 57					
37	Comp							FeNe Clear	20s
38	HD8840A	01 22 34	+88 46 26	22 43 18		10 09 E			77s
39	Comp							FeNe Clear	20s
40	HD 8890B	"	"	22 49 44		9 36 E			1549
41	Comp							FeNe Clear	20s
42	HD~~8890~~ 17	"	"	23 19 45		4 32 E			72
43	Comp							FeNe Clear	20s
44	BIAS(4)			23 23					

CCD
Spectr. Temp. −100.5°C Dome Temp./Hum. +19.8°C 46% H Transparency Conditions Slightly hazy

98

Focus 6.70

Spectr. Temp. ..... Dome Temp./Hum. +19.0°C 48% H

430 0 50 1624 4 1 ccdfmt

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
BG 39				C455 CCD	600 ℓ/mm G=2640	230μ	4150 Å	17			6.4K
9.3K		B 3.47	A3V					18	KK A*		11.8K
								19			
								20		spectr control 6 lines	22K
8.2K	2"	V 4.25	A0ρ					21			14.8
								1			
								22			28K
8.4K	2"							23	KK ργη	Pairs 24th column	13K
								24			
1750	2"	=8						25	KK ργη	20th column well separated from "A"	660
								26			
8.2K								23		(centroid on 19th column)	18K
								27			23K
								1			

pg # 3 Wed / Thurs (CP1)

Date 1995 June 21/22 Observers [KK] Tn. / Smt

Emulsion Batches:

30 cgain

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Comparison Exp.
cc33745	Comp							FeNe Clear	20s
46	HD172167	18 33 33	+38 41 26	23 32 14		1 22 E			10
47	COMP							"	20
48	COMP							"	"
49	HD187691	19 46 14	+10 09 55	23 39 39		2 42 E			100 3
50	COMP							"	20
51-59	FLAT x 9					2h E	+10°	Tung clear	10
60	BIAS(4)								
61/62	inboard / outboard HARTMAN					90 cgain new		FeNe ½ Ap	4/8
63	COMP							"	3
64	HD187691	19 46 14	+10 09 55	00 31 46		1 35 E			72
65	COMP							"	3
66	BIAS(4)							"	"
67	COMP							FeNe ½ Ap	3
68	V361 Lyr	19 02 29	+46 58 42	1 34 02		0 45 W			1800

CCD
Spectr. Temp. —100.5 °C. Dome Temp./Hum. 18.5°C/49.5% Transparency Conditions ...clear.....

Focus ...6.70..... 30 cgain

Spectr. Temp. ..... Dome Temp./Hum. 18.1°C/51.5% @ FOCUS TEST 4320 0 50 1024 4 1 ccdfmt 6 (100)

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
				CASS CCD	600 l/mm G=2640	220μ	4150Å	28			2.3K
11.0K		B 0.00	A0 V					29	KK Vega	moved star around.	4.5K
								30			
								5			
8.0K	3"	V 5.11	F8V					6	IAU Std Vel.		10.0K
								7			
								8			13.3K
								1			
CG560 in beam.		Stellar		CASS CCD	831 l/mm G=4209	300μ	8450Å	3/4	FOCUS TEST	280 0 50 1324 4 1 ccdfmt St. 11 6.70 (5.00)	
[RG6 filter in Comparison Beam]								5			
1000		V 5.11	F8V					6	IAU Std Vel		4K
								7			5K
								8			8.8K
								9			
31		V=12.6 I-R.4 max	K1V +K4V					11	Rci	Very weak, lots of sky	

pg#4 (101)

Date 1995 June 21/22 Observers [R.C.] T.n./Smt

Emulsion Batches: FILTERS AS BEFORE
90 again

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Comparison Exp.
rc 33769	COMP							FeNe Ap 1/2	3
70	V361 Lyr	19 02 29	+46 58 42	2 ~~14~~ 10		1 25 W			1800
71	COMP							FeNe Ap 1/2	3
72	BIAS(4)			2 48					-
73	Comp							FeNe A 1/2	3
74	HD 213947	22 2454	+26 0500	2 54 37		1 47E			592
75	Comp							FeNe Ap 1/2	3
76	Comp							"	"
77	HD 174724	19 00 49	+13 42 53	3 18 29		1 53 W			61
78	COMP							"	3
79	Comp							"	3
80	HD 205835	21 32 56	+39 57 51	03 28 04		0 22E			270
81	Comp							FeNe Ap 1/2	3
82	BIAS(4)			03 36					

Spectr. Temp. ~~...~~ 10.2°C ..... Dome Temp./Hum. 16.8°C / 55.3% Transparency Conditions . clear 102

Focus ..... 6.70 .....

Spectr. Temp. ..... Dome Temp./Hum. 16.6°C 56.8%

780 0 50 1024 4 1 redtest

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	~~Emulsion~~	P.H.	Program	Remarks	Quality
				CASS CCD	831 ℓ/mm G=4209	306μ	8450 Å	13			
37		V=13.6 r=12.4 max	K1 V + K4 V					12	Rc.	a little stronger than last	
								14			
								1			
								17			8.2k
370	2"3"	V 7.54	K4 III					18	Std/ucd		13.0K
								19			
								20			
2:00		V 2.99	A0 Vann					21	Telluric Std		
								22			
								36			
360	1"5"	V 5.00	A4					27	A5 (std use)		
								28			
								1			

1965 (103)

Date 1995 June 21/22 Observers [Rci] Tn (Smt

Emulsion Batches:
FILTERS AS BEFORE
90 again

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Comparison Exp.
CC 33783	Comp							FeNo Ap1/2	3s
84	HD 203504	21 17 28	+19 22 36	3 40 37		~0 25 W			
85	Comp							"	3s
86-94	FLATS x9					5m W	+20°	Twin 4Ap	2s
95	BIAS (4)			3 55					

CCD
~~Spectr~~. Temp. -100.6°C Dome Temp./Hum. 16.2°C/57.6% Transparency Conditions clear, bright sky

Focus 6.70 (104)

Spectr. Temp. ..... Dome Temp./Hum. +16.2°C 57.6%H 280 0 50 1024 4 1 ccdfast

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	~~Emulsion~~	P.H.	Program	Remarks	Quality
no filter				CASS CCD	831 ℓ/m G=4709	306μ	8450Å	5			
.2500		V 4.09	K1III					6	K1 as a std.		
								7			
06560 in for FLATS								8			11.5K
								1			
				All files to Perseus & DAT							

pg # 105 Thurs / Fri

Date 1995 June 22/23 Observers [Rm] Tn/Smt + Bln, Dbd, Bill Hodges

Emulsion Batches: .....

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Comparison Exp.
cc 33796/97	INBOARD/OUTBOARD							FeAr clear	50/60
98	BIAS(4)			21 43					—
99	COMP							FeAr clear	60
cc 33800	HD 149803	16 32 00	+29 56	21 51 08		0 35 E			1400
01	COMP							W	60
CG 41046-49	HD 144579 x4	16 01 30	+39 24						.067
50/51	" x2				22 29	0 10 W	85° Alt	0.0039 air mass	.133
cc 33802	COMP							FeAr clear	60s
03	HD 144579	16 01 30	+39 24	22 34 07		0 30 W			850s
04	Comp							FeAr clear	60s
05	BIAS(4)			22 53					
06	Comp							FeAr clear	60s
07	Juno	J 2000 17 44 44	-04 44 50	23 14 50		0.02 E			2440
08	Comp							FeAr Clear	60s
09	BIAS(4)			23 59					—

CCD Spectr. Temp. -100.5°C Dome Temp./Hum. 22.0°C/68.5% @ FOCUS TEST Transparency Conditions. clear → hazy!

Focus 6.67 Spectr. Temp. 90 again Dome Temp./Hum. 21.4°C/70.3% @ seeing test FANS ON 106

410 050 1024 4 1 ccdfmt

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	~~Emulsion~~	P.H.	Program	Remarks	Quality
2G 560 FILTER				CASS CCD	1800 l/mm G=5940	306μ	6400 Å #	3/4	FOCUS TEST	* actually @ 6382 Å set cool intentionally	
								1			
								5			
681	3"	8.40	F7V					6	IAU Std. Vel.		1.5K
								7			
despite the headers.	3"	6.45	G8Ip	CCD CCD TV GUIDER		above 306μ		–	SEEING TEST	Dome W, no wind, hazy! 62% catwalk, okay seeing.	
								–	"		
								8			
2,208	2-3"	6.45	G8Ip					9	IAU Std. Vel.		6K
								10			2.8K
								1			
								11			
436	3"	10	G2V					12	Asteroid. Near closest approach		see above log
								13			
								1			

pg #2 (107

Date 1995 June 22/23 Observers [Rm.] Tn/Sm.t

Emulsion Batches:

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Comparison Exp.
cc 33810	COMP							Fe Ar clear	60
11	HD180583	19 11 59	+27 45	0 05 32		1 09 E			870
12	COMP							"	60
13	"							"	60
14	HD 173297	18 39 20	-20 45	0 30 14		0 08 W			243
15	Comp							Fe Ar Clear	60s
16	BIAS (4)			01 09					—
17	Comp			~~07~~				Fe Ar Clear	60s
18	HD 331970	20 08 27	32 34 16	01 16 02		0 19 E			3016
19	Comp							Fe Ar Clear	60s
20	BIAS (4)			02 10					—
21	Comp							"	60
22	HD 214975	22 36 54	+56 19	2 33 57		1 56 E			1430
23	COMP							"	60
24	BIAS (4)			3 00					—

Spectr. Temp. -100.6°C Dome Temp./Hum. 20.5°C / 72.6% Transparency Conditions ... hazy (108)

Focus ..... 6.67 .....

Spectr. Temp. ..... Dome Temp./Hum. ..... 410 0 50 1024 4 1 ccdfast

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	~~Emulsion~~	P.H.	Program	Remarks	Quality
06 560 FILTER				CASS CCD	1800 l/m G=5940	306μ	6400 Å	14			
4318	3"	<V> 6.19	F6I -IIb				region 6382 Å actually	15	Rm V473 Lyr		11.5K
								16			
								17			29K
1600	3-4"	<V> 7.48	~G0Ib					18	Rm V350 Sgr	Very hazy down here	3K
								19			29K
								1			
								20			
1440	2-3"	V 9.1-9.8	F8 -G2Ib					21	Rm [MW Cyg]		3.5K
								22			
								1			
								2A			
1700	25"	<V> 8.40	~G0Ib					24	Rm 2 Lac		5.0K
								25			
								1			

Pg # 3 (109)

Date 1995 June 22/23 Observers [Rm.] Tn./Smt

Emulsion Batches:
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Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Comparison Exp.
cc33825	COMP							Fe Ar clear	60
26	HD215159	22 38 15	+53 23 08	3 05 58		1 42 E			400
27	COMP							"	60
28	COMP							"	60
29	HD203156	21 15 23	+37 48 55	3 22 12		0 0 W			600
30	COMP							"	60
31-39	FLAT x 9					0 04 W	+38°	Tung ¼ dp	8
40	BIAS(4)			3 45					—
41/42	INBOARD/OUTBOARD							Fe Ar clear	55/60

CCD Speetr. Temp. -100.5°C Dome Temp./Hum. 19.1°C / 80.6% Transparency Conditions hazy

Focus 6.67

CCD Speetr. Temp. -101.7 Dome Temp./Hum. 18.9°C / 83.1% @ FOCUS TEST

(110)

410 0 50 1024 4 1 ccdfmt

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
OG 560 FILTER				CASS CCD	1800 ℓ/mm G=5940	30μ	6400 Å	26			
2900	3"	V 6.19	K2				actually 6382 Å	27	Rm	2 Lac vel. comparison stars	11.0K
								28			
								29			
3720		V 5.8-5.9	F2					30	Rm V1334 Cyg	sky getting brighter	9.5K
								31			
								32			13.2K → 12.6K
								1			
								3/4	FOCUS TEST	Still a bit too cool. I didn't drop to 13°C like forecast suggested.	
			All files to Perseus & DAT								

(111) Fri/SAT

Date 1995 June 23/24. Observers [Bln] ..... T.n .....

Emulsion Batches:
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Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Comparison Exp.	Exp. Mtr.
CC338 43/44	Inbound / outbound	HUATMAN				00 00	+43°41	FeNe Clear	15/30	
45	BIAS			2154						
46/48	FLATS x3							TUNG Clear	11sec	
49	Comparison			Cloud at start at Zenith				FeNe Clear	20sec	
50	SKY	End of Astronomical Twilight = 22:15		22 0806					1801	100
51	SKY			22 3834					1800	112
52	BIAS(4)									
53	SKY			23 1032					1800	128
54	Comparison							FeNe Clear	20sec	
55	BIAS(4)									
CG410 52/55	HD163075	17 49 14.7	+16 40 10	2351				4v	67ms	
CG410 56/57	"					00 06E		2v	133ms	

CCD
Spectr. Temp. -100.3°C ..... Dome Temp./Hum. +20.8°C ... 75%H Transparency Conditions .. PART. Cloudy & Hazy ....

Focus .... 6.67 .....

Spectr. Temp. ..... Dome Temp./Hum. +20.0°C ... 79%H

90 Cgain

112

430 0 50 1024 4 1 CCDEMM

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
no filter				CASS CCD	600 l/mm G=2610	230μ	3920Å	3/4	Sky spectrum Hr/Ng		mHx ADq
Note * 50μ projected slit width sig. < tel slit of 194μ							±10Å	1		CCOT = -10.8°C	
∴ 230μ slit is ideal by Bln criterion								5			15.7k
								6			7k
100								7	Sky, PART cloudy, Dome west.		
112								8c:			
								1		CCOT = -10.0°C	
128								9		thin cloud throughout	
								10			
								1			
	22" I think	V 6.96	KOII		Above 230μ Slit				Seeing test.	thin cloud, no wind	
									"	Dome WNW	
				All to Perseus.							

113 Sun/Mon

Date 1995 June 25/26 Observers [Blu]/T.n./Dbd

Emulsion Batches:

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Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Comparison Exp.
CC338 56/57	Inboard / out bound		Hartmann					FeAr Clear	40/70
58	Comparison							FeAr Clear	60sec
59	BIAS(4)								
60	SKY			222947		00 00	+43 10 48		1850
61	SKY			230209					1800
62	BIAS(4)								1
63	SKY			233303					1736
64	BIAS(4)	No final comparison possible due to Rapid close because of Rain							
	Rain soaked Slit Removed before thinking of doing Flats. Probably observation would have								

Spectr. Te

Focus

Spectr. Te

Exp Mtr

1/2 - 1/4sec

417

550

550

be

CD
Spectr. Temp. −100°C ..... Dome Temp./Hum. 22.4°C 73%H Transparency Conditions ... Part. Cloudy ... 114

Focus ... 6.64 .....

Spectr. Temp. ..... Dome Temp./Hum. 12.2°C 78%H

c Lambda 395 0 50 1024 4 1 CCDFMT MAX ADU

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
no filter				CHSSCCD	831 l/mm G=3159		4880Å	3/4	focus test		
				note 1st ORDER @ 237 Å/mm dispersion				6			1A
								1			
417								7c		Dome Facing West mostly cloudy	
≈ 550								8c		completely cloudy and	
								1	Lightning storm coming from South		
≈ 550		Telescope brought down just before Readout						9		strongest line only ≈ 80% above background	
								1			
to be	Reduce anyway.										

Pg #1 (115)

Date 1995 June 28/29 Observers [Rm] Smt ..... lks. as backup

Emulsion Batches:

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Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Comparison Exp.
CC33865/66	INBOARD/OUTBOARD							Fe Ar clear	60/65
67	BIAS(4)			21 26					
CG41059-62	HD144579 x4	86 01 30	+39 24	22 02					.067
63/64	" x2				22 04	0 08 W	85° Alt	1.0038 air mass	.133
CC33868	COMP							Fe Ar clear	60
69	HD144579	16 01 30	+39 24	22 09 48		0 35 W			1250
70	COMP							Fe Ar clear	60
71	BIAS(4)			22 33					—
72	COMP							"	60
73	HD180583	19 11 59	+27 44 59	22 42 33		2 03 E			1200
74	COMP							"	60
75	BIAS(4)			23 11					—
76	COMP							"	60
77	HD331970	20 08 27	+32 34 16	23 14 29		2 17 E			1870
78	COMP							"	60
79-87	FLAT x9					0h	-4°	Tungsten Ap	7

CCD Spectr. Temp. −100.5°C Dome Temp./Hum 20.2°C / 72.2% @ focus test Transparency Conditions .. partly cloudy, thin overhead, thick to S and horizon.

Focus 6.67 (116)

Spectr. Temp. ..... Dome Temp./Hum. 19.9°C / 77.1% @ seeing test

445 0 50 1024 4 1 ccdfmt

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	~~Emulsion~~	P.H.	Program	Remarks	Quality
Xg 560 FILTER				CASS CCD	1800 l/mm G=5928	30μ	6400Å	3/4	FOCUS TEST	set in focus.	
								1			
	3"	6.66	G8 I	EEV CCD TV GUIDER		above 30μ		–	SEEING TEST	Done W, med. E wind, clouds below 0° dec and around horiz	
	-4"	"	or Gg8					–	"	85% catwalk N FAN ON	
				CASS CCD				5		flash of lightning on horiz to SW	
1440	4"	6.66	G8V					6	IAU Std. Velocity	some cloud.	3.7K
								7			
								1			
								8		can see α Boo, α Lyr but not 24	
3033	5"	<V> 6.19	F6 I -IIb					9	Rm	V473 Lyr thicker cloud now	6.5K
								10			
								4			
								11			
470	4-5"	V 9.1-9.8	F8-G2Ib					12	Rm	sky lines, in cloud here MW Cyg using SBIG to autoguide.	10K
								13			
								14		overcast sky	11.6K → 10K

pg #2 (117)

Emulsion Batches:

Date 1995 June 28/29. Observers [Rm] Smt ; iks as backup

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Comparison Exp.
CC33888	COMP							Fe+ clear	60
89	HD203156	21 15 23	+37 48 55	1 20 28		1 38 E			630
90	COMP							"	60
91	BIAS(4)			1 33				-	-
92	COMP							"	60
93	HD214975	223654	+56 19	1 47 50		2 06 E			2200
94	COMP							"	60
95	BIAS(4)			2 27					—
96	COMP							"	60
97	HD215159	82 38 15	+53 23 08	2 33 13		1 52 E			400
98	COMP							"	60
99	COMP							"	"
CC33900	HD213947	22 29 54	+26 05	2 57 01		1 18 E			540
01	COMP							"	60
02	BIAS(4)			3 08					—
03/04	INBOARD/OUTBOARD					0h	+31°	"	60/60

CCD
Spectr. Temp. -140.7°C Dome Temp./Hum. 18.6°C/86.3% Transparency Conditions . cloud back down to pg #2
0° dec again

Focus ..... 6.67 .....

Spectr. Temp. ..... Dome Temp./Hum. 18.3°C/90.2% 415 0 50 1024 4 1 ccdfmt

118

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
26 560 FILTER				CASS CCD	1800 2/mm G=5928	30μm	6400 Å	15		1 hour cloudy break before this exposure.	
2485	4"	V 5.8-5.9	F2					16	Rm	couple of minutes in an isolated cloud. V1334 Cyg	7.5K
								17			
								1			
								18			
1051	3"-4"	<V> 8.40	~GOIb					19	Rm	no cloud here Z Lac	2.6K
								20			
								1			
								21			
2610		V 6.19	K2					22	Rm	Z Lac velocity comparison star	7.8K
								23			
								24			
1000	4"	V 7.53	K4 III					25	IAU Std. Velocity	95% humidity on outside 92% in dome, some cloud here	3.0K
								26			
								1			
				All to Persons & DAT				3/4	Focus TEST	still in focus.	

Pg #1 (119)

Date 1995 June 30/July 1 Observers [Rm] Smt ... iks as backup

Emulsion Batches:
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Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Comparison Exp.
cc33905/06	INBOARD/OUTBOARDS							Feder clear	60/65
07	BIAS(4)			1 09					—
08	COMP							"	60
09	HD173297	18 39 24	-20 45	1 18 32		1 12 W			1261
10	COMP							"	60
11	BIAS(4)			1 44					—
12	COMP							"	60
13	HD171391	18 29 29	-11 03 19	1 52 46		1 41 W			300
14	COMP							"	60
15-23	FLAT x 9					0^h	-20°	Tung ¼ Ap.	7
24	BIAS(4)			2 21					—

CCD
Spectr. Temp. -100.4°C Dome Temp./Hum 20.2°C/91.8% @ FOCUS TEST Transparency Conditions hazy, partly cloudy

Focus 6.6.7

Spectr. Temp. Dome Temp./Hum. 19.9°C/93.4% @ close

120

415 0 50 1024 4 1 ccdfast

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	~~Emulsion~~	~~P.H.~~	Program	Remarks	Quality
OG 560 FILTER				CASS CCD	1800 l/mm G=5928	306μ	6400 Å	3/4	FOCUS TEST	chip @ -80°C @ start @ -98°C @ end.	
								1			
								5			
980	5"	<V> 7.48	~GOIb					6	Rm	V350 Sgr, cloudy, hazy here. 2.4K reset spec controller beforehand	
								7			
								1			
								8			
1025	5"	V 5.14	G8III					9	IAU std Velocity	thick haze, very humid	2.2K
								10			
								11		done closed now, Dr. off 11K done shutters are not. →10.3K	
								1		fog & cloud rolling in.	
				All to Persons & DAT							

Pg #1 (121)

Date 1995 July 2/3 Observers [Bin] Dbd / Smt

Emulsion Batches:

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Comparison Exp.
cc33925/26	INBOARD/OUTBOARD			CCD	still cooling slightly.			Fe Ar clear	50/60
27	BIAS(4)			21 15					
28	COMP							Fe Ar clear	60
29	HD130841	14 45 21	-15 37 34	21 20 00		0 56 W			95
30	COMP							Fe Ar clear	60
31	HD130841	"	"	21 28 15		1 07 W			215
32	COMP							"	60
33	BIAS(4)			21 40					—
34	COMP							"	60
35	HD130109	14 41 12	+2 18 51	21 43 47		1 25 W			200
36	COMP							"	60
CG41065-68	HD144579 x4	16 01 30	+39 25 36						.067
69/70	" x2				22 00	0 19 W	84° Alt	1.005 airmass	.133
cc33937-39	FLAT x3							Tung ½ Ap Fe Ar clear	3
40	COMP								40

Spectr. Temp. −100 Dome Temp./Hum. 14.6°C/61.5% Transparency Conditions . . clear

Focus . . . . . 6.69 @ FOCUS TEST START FANS ON

Spectr. Temp. . . . . Dome Temp./Hum. 13.5°C/65.3% 415 0 50 1024 4 1 ccdfmt

@ seeing test

122

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	~~Emulsion~~	~~P.H.~~	Program	Remarks	~~Image Qual. Quality~~
26 560 FILTER				CASS CCD	1800 l/mm G=5570	30μm	5900 Å	3/4	FOCUS TEST	T=14.2°C slightly cool for T drop.	
								1			
								5			
5100	5"-6"	✓ 2.74	Am					6	Bln	TEST EXPOSURE brighter in field S/N ~ 350:1	9.5K
								7			
11K	5"-6"	"	"					8	Bln	TRAILED S/N ~ 530:1	~9K
								9			
								1			
								10			
5400	5"	✓ 3.72	AOV					11	Telluric Std.		11.2K
								12			
	5"	✓ 6.66	G8V	EEV CCD TV		above		—	SEEING TEST	Dome SW, very light SW wind clear with hazy horizon 60% on catwalk.	
		"	"	GUIDER		30μm		—			
								13			14.4
								14			

pg #2 (123)

Date 1995 July 2/3 Observers [Bln] Dbd/Smt

Emulsion Batches:
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Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Exp.
cc33941	HD144579	16 01 30	+39 24	22 08 48		0 44 W			900
42	COMP							Fe Ar clear	60
43	BIAS(4)			22 26					
44/45	INBOARD/OUTBOARD					0h	+44°	Fe Ar clear	40/70
46	BIAS(4)			23 06					—
47	COMP							Fe Ar clear	60
48	SKY			23 12 00		0h	+44°		1800
49	SKY			23 45 12		"	"		1800
50	SKY			00 18 30		"	"		1800
51	COMP							Fe Ar clear	60
52	BIAS(4)			D 52					—
53-55	FLAT x 3					"	"	Tung clear	5
56	BIAS(4)			D 57					—
57/58	INBOARD/OUTBOARD							Fe Ar clear	40/75
59	BIAS(4)			1 41					

Spectr. Temp. -100.4°C Dome Temp./Hum. 13.1°C / 66.4% Transparency Conditions . clear, no moon

Focus . . . . 6.69 / 6.76 / 6.79 (5900Å / 4845Å) (124)

Spectr. Temp. . . . . Dome Temp./Hum. 11.3°C / 77.9% (@ last focus test) 415 0 50 1024 4 1 ccdfmt

G 560 Exp. Mtr. FILTER	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	~~Emulsion~~	~~P.H.~~	Program	Remarks	~~Prev. Anal. Quality~~
2760	5"	6.66	dG8	CASS CCD	1800 ℓ/mm G=5570	306μ	5900Å	15	IAU Std. Velocity		50K
								16			
								1			
NO FILTER				CASS CCD	831 ℓ/mm G=3156	250μ	4845Å ±1Å	3/4	FOCUS TEST	440 0 50 1024 4 1 ccdfmt 6.76 FOCUS. T=12.6°C	
								1			
								17			
70								18	B/n	only one feature (broad) a red end — will be tough to overlap.	
71								19	"	hot pixel streaked across columns in all 3 exposures	
?								20	"		
								21			
								1			
								22			14.5K → 14.2K
								1			
				CASS CCD	1800 ℓ/mm G=4568	306μ	4463Å ±1Å	3/4	FOCUS TEST	430 0 50 1024 4 1 ccdfmt	
								1		425 0 50 1024 4 1 ccdfmt	

Pg #3 (125)

Date 1995 July 2/3 Observers [Blm] Dbd / smt

Emulsion Batches:

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Comparison Exp.
cc33960	COMP							Feth clear	60
61	HD138629	15 28 12	+41 14 19	1 49 43		4 52 W			500
62	COMP							"	60
63	HD138629	"	"	2 03 06		5 28 W			1800
64	COMP							"	60
65	BIAS(4)			2 36					—
66	COMP							"	60
67	HD164852	17 58 07	+20 50 00	2 43 07		3 27 W			1200
68	COMP							"	60
69	COMP							"	"
70	HD187691	19 46 14	+10 09 55	3 19 42		2 07 W			730
71	COMP							"	60
72	BIAS(4)			3 35					
73	COMP							"	60
74	HD210459	22 05 33	+32 41 15	3 41 33		0 08 W			600
75	COMP							"	60
76 - 95	FLAT x 20					0 13 W	+33°	Tung clear	22

CCD
Spectr. Temp. -100.4°C Dome Temp./Hum. 11.9°C / 75.8% Transparency Conditions clear

Focus 6.79

Spectr. Temp. Dome Temp./Hum. 11.4°C / 79.0% during last exposure

126

425 0 50 1024 4 1 ccdfmt

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	~~Emulsion~~	P.H.	Program	Remarks	MAX ~~Quality~~ ADU
BG 39 FILTER				CASS CCD	1800 Rl/mm G=4568	30μm	4463 Å	23			
4900	5"	B 5.09	A5 V				31 Å	24	Bin A-shell	S/N ~ 165:1	2.6K
								25			
14.4K		"	"					26	Bin A-shell.	S/N ~ 280:1	7.6K
								27			
								1			
								28			
9.5K	4.5"	B 5.19	B3 IV					29	Bin Sp. Bin.	S/N ~ 240:1	4K
								30			
								5			
5.4K		V 5.11	F8 V					6	Std. Vel.		2.4K
								7			
								9			
14.6K	5"	B 4.75	F5 III					10	Bin A-shell	sky getting bright by the end. S/N ~ 280:1	7.5K
								12			
				All to Persens & DAT				14			78.0K → 5.0K

pg #1 127

Bill Hodges

Date 1995 July 6/7 Observers [Bln] Hgs / Smt

Emulsion Batches:

CSS 386 clock ~13 sec ahead of WWV

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Comparison Exp.	Exp Mtr
cc33996/97	INBOARD/OUTBOARD							FeAr clear	40/75	Bo 39 Fe 22K
98	BIAS(4)									
99	COMP							"	60	
cc34000	HD130841	14 45 21	-15 37 34	21 43 39		1 45 W			670	11.3K
01	COMP							"	60	
02	COMP							"	60	
03	HD148283	16 21 50	+37 37 18	22 09 51		0 57 W			1900	17.3K
04	COMP							"	60	
05	BIAS(4)			22 47					-	
06	COMP							"	60	
07	HD152614	16 49 17	+10 19 48	22 57 39		0 54 W			600	14.8K
08	COMP							"	60	
09	COMP							"	"	
10	HD164852	17 58 07	+20 50 00	23 23 51		0 28 W			1567	18.4K
11	COMP							"	66	

Spectr. Temp. -100.4°C Dome Temp./Hum. 23.1°C/68.7% Transparency Conditions partly cloudy 128

Focus 6.65

Spectr. Temp. ..... Dome Temp./Hum. .....

425 0 50 1024 4 1 ccdfast

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	~~Emulsion~~	P.H.	Program	Remarks	max ~~Quality~~
BG 39 FILTER				CASS CCD	1800 l/m G=4568	30μm	4462Å	3/4	FOCUS TEST	right in focus	
								1			
								5			
11.3K	3"	B 2.89	Am					6	Bln SB	S/N ~ 215:1 through cloud mostly.	5.2K
								7			
								8			
17.3K	3-4"	V 5.52	A5V					9	Bln A-shell	S/N ~ 350:1	11.0K
								10			
								1			
								11			
14.8K	4"	B 4.30	B8V					12	Bln SB	S/N ~ 315:1	8.4K
								13			
								14			
18.4K		B 5.19	B3IV					15	Bln SB	cloud @ end. taken 20 minutes after exposure's end.	10K
								16			

Pg # 2 (129)

Date 1995 July 6/7 Observers [Bln] Hgs / Smt

Emulsion Batches:
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Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Comparison Exp.
CC34012	BIAS(4)			0 10					—
13	COMP							FeAr clear	60
14	HD172187	18 33 42	+43 08 12	0 24 12		0 54 W			1550
15	COMP							"	60
16 - 35	FLAT x 20					0^h	-9°	Tung clear	22
36	BIAS(4)			1 32					—
37	COMP							FeAr clear	60
38	HD164577	17 56 41	+1 18 27	1 58 48		2 59 W			1205
39	COMP							"	60
40	COMP							"	"
41	HD180316	19 11 00	+27 46	2 28 26		2 16 W			1200
42	COMP							"	60
CG41071-74	HD207754 x 4	21 46 12	+43 25						.067
75/76	" x 2				~3 00	0 06 E	89° Alt	1.0002 airmass	.133
CC34043	BIAS(4)			3 01					—

Spectr. Temp. -100 °C Dome Temp./Hum. 21.2°C / 82.8% Transparency Conditions partly cloudy

Focus 6.65 N FAN ON ONLY 130

Spectr. Temp. Dome Temp./Hum 20.8°C / 79.7% after opening again 425 0 50 1024 4 1 cc/fast

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	~~Emulsion~~	P.H.	Program	Remarks	Quality
@ 39 FILTER				CASS CCD	1800 l/mm G=4568	306μm	4462 Å	1			
								17			
7.2K	4"	B 6.40	FOX					18	Bln SB	through cloud @ beginning and end. S/N ≈ 210:1	4.1K
								19		closed shutters @ end.	
								20		drive off dome closed.	15.4K → 14.2K
								1			
								21		dome open now ~ ½h later.	
16.4K	5"	B 4.46	A1V					22	Bln SB	clear now, don't see drizzle S/N ≈ 280:1 double lines but I don't know what I'm looking for.	7.5K
								23			
								24			
2.8K	4"	B 6.64	B8					25	Bln SB	S/N ≈ 130:1	1.7K
								26			
	4"	V 7.32	KO III	EEV CCD IN GUIDER		above 306μm		—	SEEING TEST	20.4°C, 81.2% Dome W, no wind now,	
	"	"	"					—	"	clear now, 90% catwalk	
				CASS CCD				1			

pg #3 (131)

Date 1995 July 6/7 Observers [Blm] Hgs/Smt

Emulsion Batches:

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Comparison Exp.
EC34044	COMP							FeAr clear	60
45	HD154528	17 00 54	+77 48	3 23 43		5 31 W			1300
46	COMP							"	60
47	BIAS(4)			3 49					—
48/49	INBOARD/OUTBOARD					0h	+36°	FeAr clear	40/75

Spectr. Tem
Focus
Spectr. Tem

Exc Mir
Bck 39 FILTER
2.9k #

Spectr. Temp. -101.6°C Dome Temp./Hum. 81.5% / 20.4°C Transparency Conditions ..Clear.....

Focus .....6.65.....

Spectr. Temp. ..... Dome Temp./Hum. 19.7°C / 78.8% @ FOCUS TEST

132

425 0 50 1024 4 1 coadd

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	~~Emulsion~~	~~P.H.~~	Program	Remarks	Quality
BG39 FILTER				CASS CCD	1800 l/m G=4568	300μm	4462 Å	27		reset spec. contr. tel on E side	
2.9k *	5"-6"	✓ 6.66	A0					28	Bkn SB	* sky getting brighter S/N ~ 135:1	2.0K
								29			
								1			
								3/4	FOCUS TEST		
		All to Perseus									

pg #1 133

Date 1995 July 8/9 Observers [Blm] Hgs / Smt

Emulsion Batches:

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Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Comparison Exp
CC34050/51	INBOARD/OUTBOARD							FeAr clear	60/60
52	BIAS(4)			0 37	~~1 3~~				—
53	COMP							FeAr clear	60
54	HD186205	19 37 54	+8 59	0 44 22		0 17 W			1530
55	COMP							"	60
56	BIAS(4)			1 15					—
57	COMP							"	60
58	HD177724	19 00 49	+13 42 53	1 25 07		1 10 W			20
59	HD177724	"	"	1 27 21		1 12 W			30
60	COMP							"	60
61 - 80	FLAT x 20					0^h	+14°	Tung 1/4 Ap	4
81	BIAS(4)			2 02					—

Spectr. Temp. -100.0°C Dome Temp./Hum. 12.5°C/81.2% @ FOCUS TEST Transparency Conditions partly cloudy

Focus 6.76

Spectr. Temp. Dome Temp./Hum.

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	~~Emulsion~~	~~P.H.~~	Program	Remarks	Quality
BG 39 FILTER				CASS CCD	1800 l/mm G=6085	300μ	6604 Å	3/4	FOCUS TEST	425 0 50 1024 4 1 ccdfast	
								1		420 0 50 1024 4 1 ccdfast	
OG 560 FILTER								5			
not working	5"	8.43	B2V					6	Bin He*	95% on catwalk, done dripping, slit 1.30:1	1.6K
								7			
								1			
								8			
—	5"	2.99	AOIn					9	Telluric Std.	moved star around.	1.9K
—	5"	"	"					10	"	left star alone.	2.6K
								11			
								12		Dome closed, too wet	14.6K → 13.6K
								1			
				All for Perseus							

pg #1 135

Date 1995 July 9/10 Observers [Bln] Hgs/Smt

Emulsion Batches:

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Comparison Exp.
cc 34082/83	INBOARD/OUTBOARD							Feder clear	40/75
84	BIAS(4)								—
85	COMP							"	60
86	HD152614	16 49 17	+10 19 48	22 44 35		0 54 W			615
87	COMP							"	60
88	COMP							"	"
89	HD158 352	17 23 44	+0 24 42	23 02 13		0 55 W			1550
90	COMP							"	60
91	BIAS(4)			23 45					—
92	COMP							"	60
93	HD138629	15 28 12	+41 1419	23 53 19		3 35 W			1201
94	COMP							"	60
95	COMP							"	"
96	HD164852	11 58 07	+20 50 00	0 24 17		1 35 W			1207
97	COMP							"	60

Spectr. Temp. −100.4°C Dome Temp./Hum. 17.2°C/75.8% @ FOCUS TEST Transparency Conditions partly cloudy → clear near full moon

Focus 6.76

Spectr. Temp. Dome Temp./Hum.

FANS OFF 136

430 0 50 1024 4 1 ccdfast

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	~~Emulsion~~	~~P.H.~~	~~Program~~ PROGRAM	Remarks	Quality
NOT WORKING				CASS CCD	1200l/mm G=4568	306μ	4462Å	3/4	FOCUS TEST		
								1			
								5			
—	4"	B 4.30	B8V					6	Bin 5B	S/N ~ 350:1	11.2K
								7			
								8			
—	4"	B 5.66	A8V		S/N ~ 305:1			9	Bin A-shell	lost all header info when 5B failed during readout. Done 10 minutes after end of exposure	7.6K
								10			
								1			
								11			
—	4"	B 5.09	A5V					12	Bin A-shell	S/N ~ 370:1	14.5K
								13			
								14			
—		B 5.19	B3IV					15	Bin 5B	S/N ~ 355:1	11.0K
								16			

Pg #2 137

Date 1995 July 9/10 Observers [Blm] Hgs. 15mt

Emulsion Batches:

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Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Comparison Exp.
CC34098	BIAS(4)			0 50					
99	COMP							FeAr clear	60
CC34100	HD172187	18 33 42	+43 08 12	0 57 21		1 34 W			1200
01	COMP							"	60
02	COMP							"	"
03	HD180316	19 11 00	+27 46	1 27 45		1 36 W			1800
04	COMP							"	60
05	BIAS(4)			2 02					
06	COMP							"	60
07	HD192518	20 10 08	+28 23 30	2 08 13		1 08 W			1200
08	COMP							"	60
09	COMP							"	"
10	HD210459	22 05 33	+32 41 15	2 39 08		0 28 E			600
11	COMP							"	60
12	BIAS(4)			2 53					

Spectr. Temp. ...100°C.... Dome Temp./Hum. 15.7°C/80.7% Transparency Conditions .. clear, Moon setting.....

Focus .....6.76.....

Spectr. Temp. ..... Dome Temp./Hum. 14.3°C/86.1%

138

430 0 50 1024 4 1 ccdfast

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	~~Emulsion~~	~~P.H.~~	Program	Remarks	Quality
NOT WORKING				CASS CCD	1800 Rl mm G=4669	300u	4462Å	1			
								17			
—	4"	B 6.40	FOV					18	Bln SB	S/N ~ 220:1	5.2K
								19			
								20			
—	3"	B 6.64	B8					21	Bln SB	some sky lines? S/N ~ 195:1	2.9K
								22			
								1			
		B= 5.36						23			
—	3"-4"	~~5.36~~	ATIV					24	Bln A-shell	S/N ~ 315:1	8.6K
								25			
								26			
—	3"	B 4.75	F5III					27	Bln A-shell		8.8K
								28			
								1			

Pg # 3 139

Date 1995 July 9/10 Observers [B/2] Hgs. 15m+

Emulsion Batches:
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.....
.....

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Comparison Exp.
CG41077-80	HD 207754 x 4	21 46 12	+43 25						.067
81/82	" x 2				03 03	0 06 W	89° Alt		.133
CC34113-32	FLAT x 20					0h	+43°	Tung Clear	22
33	BIAS(4)								—
34/35	INBOARD/OUTBOARD					"	"	Feder Clear	40/75

Spectr. Temp. ~10:7°C Dome Temp./Hum. 14.3°C / 86.1% @ seeing test Transparency Conditions .... clear, humid....

Focus ..... 6.76 ..... 430 0 5a 1024 4 1 cool fast

Spectr. Temp. ..... Dome Temp./Hum. ..... FANS OFF 140

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
	3"	7.32	KOEIII	EEV CCD TV		above 30μm		–	SEEING TEST	Dome W, no wind, clear	
				GUIDER				–		95% on catwalk, dome is wet	
								29		Done closed now, mirrors covered.	14K → 12K
								1			
								3/4	FOCUS TEST		
			All to Perseus.								

141

Date 1995 July 10/11 Observers KK/SmT

Emulsion Batches:

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Comparison Exp.
01624 CFO1566	comparison							diffuser FeNe	60
0165 ~~1567~~	bias[4] (mean of 4)								—
26 ~~1568~~	HD172167	18 36.8	+38 46 (1995)	21 54 35			filter =	OG560	116s
27 ~~1569~~	comparison							FeNe	60s
28 ~~1570~~	HD 172167	"	"	22:05:51				OG560	134
29 1571	HD159561	17 30 18 ~~18 37 58~~	12 37 58	22:17 00				"	706s
30 ~~1572~~	HD159561	"	"	22 31 03				"	619
31 ~~1573~~	comparison							FeNe	60
32 ~~1574~~	HD 182640	19 20 27	+2 54 55	22 50 53	23 10:00			OG560	1148
33 ~~1575~~	"	"	"	23 10 41	23 36 00			"	1512
34 ~~1576~~	"	"	"	23 36 38	23 46			"	569 ~~60~~
35 ~~1577~~	comparison							FeNe	~~120~~ 60
36-40 ~~1578-82~~	flats ×5							Tung clear	15
41 ~~1583~~	comp						diffuser out	FeNe	60
~~42~~ 9584	42 Hartmann - INBOARD			19:48	next day		"	FeNe	30
1585	43 OUTBOARD			19:49					30

Spectr. Temp. ..... Dome Temp./Hum. 19.3 / 62% Transparency Conditions ..cloudy.....

Focus .....

Spectr. Temp. ..... Dome Temp./Hum. 0 400 1024 128 1 1

142

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	~~Emulsion~~	~~P.H.~~ C.	Program	Remarks	Instr. Quality ADU
				FP	J600/403	7x50	CCD		engineering		
							8600Å	1			
50000		B 0.04	AOV							Vega	90000
								3			
50000		B 0.04	AOV								
35000		B 2.23	A5III								
50000		"	"								100000
								3			
25000		B 3.68	FoIV					6			60000
25100		"	"					6			
6560		"	"							clouds, eff. end 23:43	
											80000
				To Persons ONLY with corrected filenames & headers.						strongest saturated	

pg #1 of 2 143

Date 1995 July 11/12 Observers KK/Smt

Emulsion Batches:

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Comparison Exp.	Exp. Mtr.
CF01644 ~~1586~~	Bias (4)								—	Dark film Bo 39
45 ~~1587~~	Comparison						No diffuser	FeNe	180s	
46 ~~1588~~	HD 125162	14 12 35	+46 32 51	21 10*					751	9000
47 ~~1589~~	"	"	"	21 26					940	9500
48 ~~1590~~	"	"	"	21 43 20					960	9300
49 ~~91~~	COMP						"	FeNe	180	
50 ~~92~~	HD155125 ~~HD141795~~	17 04 39 ~~15 45 50~~	-15 36 04	22 19 05					600	15500
51 ~~93~~	HD155125	17 04 39	-15 36 04	22 30 53					530	15500
52 ~~94~~	"	"	"	22 41 13		~0 45 W			560	15500
53 ~~95~~	COMP						"	FeNe	180	
54 ~~96~~	HD141795	15 45 50	+4 46 43	22 59 53					730	15.1K
55 ~~97~~	"	"	"	23 14 16					1090	14K
56 ~~98~~	"	"	"	23 33 37		~4h W			1140	15.0K
57 ~~99~~	COMP							FeNe	180	

Spectr. Temp. ~100°C Dome Temp./Hum. 19.1/60% Transparency Conditions ..slight haze - full moon

Focus ..... GOOD

Spectr. Temp. ..... Dome Temp./Hum. .....

0 400 1024 128 1 1 T= -110° 144

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	~~Emulsion~~ CX	P.H.	Program	Remarks	TOTAL AOQ Quality
-	blue filter BG 39				FF CCD 600G/31.6	~~7x50~~	4150 Å ~~CCD~~				
180											
751	9000		V4.25	A0p						*clock 5m fast	9000
940	9500		"	"				4	kk A*	ALL clock corrected to within seconds of ASTRO-CLOCK	
949	9300		"	"				4	"		
189								5			
600	15500		~~V2.49 3.73~~	~~A1 V A2m~~				6	kk A*	sl. weak due to guiding, I guess	
590	15600		V 2.49	A1V				6	"	took refin into account when guiding	~30K
560	18500							6	"		
180								7		set telescope to next * during comp	
732	10.1K	4"	V 3.73	A2m				8	kk A*		
1090	10.9K	6"	"	"				8	"	lost the seeing, weaker than 1*	
1103	10.0K	6"	"	"				8	"	weaker still.	
190								9		max ADU ~1400	

pg# 2 of 2 (145)

Date 1995 July 11/12 Observers [KK] Smt

Emulsion Batches:

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Comparison Exp/s	Exp Mtr
	~~Bias (4)~~									36 39 FR
CE0158	HD172167	18 33 33	+38 41 26	0 01 22					145	52K
59	"	"	"	0 04 22					102	51K
60	"	"	"	0 06 31					103	52K
61	COMP						diffuser out	FeNe clear 4p.	180	83K
62-66	FLAT x5						diffuser in	Tung clear 4p	120	
67	BIAS(4)			0 48						
68	BIAS(4)			0 49						

Spectr. Ten
Focus ..64
Spectr. Ten

Spectr. Temp. ...-100.°C..... Dome Temp./Hum. 16.3°C/48.5% Transparency Conditions . Thin w. spty. clouds.....

Focus .. 60000.....

Spectr. Temp. ..... Dome Temp./Hum. .....

(147

0 400 1024 128 1 1 coadd

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	~~Emulsion~~	~~P.H.~~ C.	Program	Remarks	Quality
BG 39 FILTER				FFCCD	600G/31b	7x50	4150Å				
52K	3"	B 004	AOIV					10	KK A* Std.		>90K
52K		"	"					10	"	Very well matched to above	"
52K		"	"					10	"	"	"
8.3K								11			
								10 exps.		max ADU ~ 1700–1900	
										cosmic ray.	
				All to Perseus with corrected filenames							

pg #1 Wed/Thur (147)

Date 1995 July 12/13 Observers KK/Swt

Emulsion Batches:

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Comparison Exp.	Exp. Mtr
CF01669	Bias <4>								—	
70	COMP			20:58				diffuser out FeNe	180	
71	HD136202	15 14 12	+2 08 37	21 04 23		1 11 W			1300	1250
72	COMP							"	180	
73	HD159561	17 30 18	+12 37 58	21 39 10		0 33 E			1100	1080
74	COMP							"	180	
75	HD172167	18 33 33	+38 41 26	22 04 27					201	50K
76	"	"	"	22 08 09					137	50K
77	"	"	"	22 10 56		1 17 E			236	50K
78	COMP							"	180	
79-83	FLAT x 5							diffuser in Tung clear	120	
84	BIAS (4)			23 13					—	
85	HD155125	17 04 39	-15 36 04	23 24 36					339	300K
86	"	"	"	23 31 06					383	50K
87	"	"	"	23 38 35		1 39 W			349	300K
88	COMP							diffuser out FeNe	180	

Spectr. Temp. −100 °C Dome Temp./Hum. 21.2/54% Transparency Conditions patchy cloud → ~~increasing~~

Focus ..same as last night

Spectr. Temp. ..... Dome Temp./Hum. 20.4/60.7%

0 400 1024 128 1 1 ccdfast

148

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	~~Emulsion~~	~~P.H.~~	Program	Remarks	Quality
BG 39 FILTER				FF	600c /40.3°	7x 50	4150 Å	1			
								3			
1250	3"-4"	V 5.06	F8 ~~V~~ I					4	Std. Vel.	in cloud.	~6000 AOV above baby
								5			
9260	3"	B 2.23	A5 III					6	KK A*	in cloud, most of counts in the a few minutes at the end.	~10K AOV above baby
								7			
50K		B 0.04	A0 V					8	KK A* (Vega)	in cloud, just barely visible	~90K AOV
50K		"	"					9	"	less cloud now.	
50K		"	"					8	"	"	
								10			
								11		done closed	not 1.9K
								1			
~~10K~~ 10.0K		V 2.49	A1 V					4	KK A*	done opened 5 min before clear now	
10.0K								4		slightly stronger than 1st	
10.0K								4		" weaker "	
								5		clouds rolling in quickly	

Pg #2 (149)

Date 1995 July 12/13 Observers [KK] Smt

Emulsion Batches:

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Comparison Exp
CF01689	HD182640	19 20 27	+2 54 55	0 00 14		0 02 E			1100
90	COMP							diffuse out FeNe	180
91	BIAS(4)			0 30					—
92	Hartmann inboard								
93	Hartmann outboard			0 37					
	inboard			0 43					
	outboard			0 45					

Spectr. Tem
Focus
Spectr. Tem
Exp Mtr
5192

Spectr. Temp. ..... Dome Temp./Hum. 20.2°C/63.0% Transparency Conditions .. patchy cloud again.....

Focus .....

Spectr. Temp. ..... Dome Temp./Hum. .....

150

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
5382		B 3.68	FO IV	FF CCD	600C/ 40.3°	7x50μ FIBERS	4150Å	6	KK A*	in and out of cloud.	TOTAL EXP. ~7K
								7			
								1			
				All to Perseus							

pg 1 of 1 (151)

Date 1995 July 13/14 Observers KK

Emulsion Batches:

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Comparison Exp.
CF01694	Hartmann inboard			19 43					
95	Hartmann outboard			19 45					
96	bias			19 48					
97	comparison			22 05					300
98	dark			22 10					300
99	bias								300
1700	comparison								
01	dark								300
⋮	same pattern repeated upto								
1714	bias								

Spectr. Temp. ..... Dome Temp./Hum. ..... Transparency Conditions .....

Focus .....

Spectr. Temp. ..... Dome Temp./Hum. .....

152

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality

pg 1 of 4 [Tues/Wed] 153

Date 1995 July 18/19 Observers Bln/Smt

Emulsion Batches:

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Comparison Exp.	Exp. Mtr.
CC34136/37	INBOARD/OUTBOARD							Featr clear	50/60	0B. 560 FILTER
38	BIAS(4)								—	
39	COMP							"	60	
40	HD130841	14 45 21	-15 37 34	21 28 45		~ 2^h W			160	1.9K
41	COMP							"	60	
42	COMP							"	60	
43	HD130109					2 25 W			150	5.3K
44	COMP							"	60	
45	BIAS(4)			21 45					—	
46-48	FLAT x3					2 40 W	+2°	Tung ½ Ap	9	
49/50	INBOARD/OUTBOARD							Featr clear	40/75	0B. 74 FILTER
51	BIAS(4)			22 32					—	
52	COMP							"	60	
53	HD138629	15 28 12	+41 14 19	22 42 52		2 56 W			45	1.1K
54	COMP							"	60	

Spectr. Temp. −100.2°C Dome Temp./Hum. 19.9°C/67.1% Transparency Conditions ...Clear.....

Focus ..... 6.62/~~6.62~~ 6.72 @ FOCUS TEST.

Spectr. Temp. ..... Dome Temp./Hum. 19.0°C/74.8% @ 2ND FOCUS TEST FANS ON (154)

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	~~Emulsion~~	~~P.H.~~	Program	Remarks	Quality
BG 560 FILTER				CASS CCD	1800 l/mm G=5645	306μ	5895 Å	3/4	FOCUS TEST	420 0 50 1024 41 ccdbias good	
								1		430 0 50 1024 41 ccdbias	
								5			
11.9K	5"	V 2.74	Am					6	Blq	S/N ~ 550:1	12.4K
								7			
								8			
5.3K		V 3.72	A0 V					9	Telluric Std.		12.5K
								10			
								1			~~12.5K~~
								11			13K ~~12.5K~~
BG 39 FILTER				CASS CCD	1800 l/mm G=4655	306μ	4465 Å* *(4463 ± 2 Å)	12/13	FOCUS TEST	set a bit cool but T is falling T=19.0°C	
								1			
								14		cosmic rays	
16.0K	5"	B 5.09	A5 V					15	Blq A-star		8.5K
								16			

pg 2 of 4 (155)

Date 1995 July 18/19 Observers Bln/Smt

Emulsion Batches:

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Comparison Exp.
cc34155	COMP							FeAr clear	60
56	HD148283	16 21 50	+37 37 18	23 08 50		2 38 W			1510
57	COMP							"	60
58	BIAS(4)			23 38					—
59	COMP							"	60
60	HD152614	16 49 17	+10 19 48	23 45 52					575
61	COMP							"	60
62	COMP							"	60
63	HD158352	17 23 44	00 24 42	00 09 37		2 43 W			2000
64	COMP							"	60
65	BIAS(4)			0 50					—
66	COMP							"	60
67	HD164577	17 56 41	1 18 27	?		2 40 W			~20min?
68	COMP							"	60
69	HD164577	"	"	1 25 37		3 08 W			900
70	COMP							"	60

Spectr. Temp. -100.7°C Dome Temp./Hum. 18.0°C / 76.4% Transparency Conditions fine, some clouds to S, windy.

Focus 6.68 FANS ON (156)

Spectr. Temp. ..... Dome Temp./Hum. ..... 430 0 50 1024 4 1 ccd/hf

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	~~Emulsion~~	~~P.H.~~	Program	Remarks	Quality
60 BG 39 FILTER				CASS CCD	1600 l/mm G = 4655	300μ	4463Å	17			
150 16.2K	5"	V 5.52	A5V					18	Bln A-shell		7.3K
60								19		cosmic ray	
-								1			
60								20		S FAN TURNED OFF	
585 16.4K	5"	B 4.30	B8V					21	Bln SB		8.3K
60								22			
60								23			
2000 11.1K		B = 5.66	A8V					24		Light clouds @ 00:21 Moderate @ times	
60								25			
-								1			
60								26			
1620 188K		B 4.46	A1V					27	Bln SB	ACER crashed during exposure, all header info lost. time-dos is 8h ahead	7.5K
								28			
180 16.5K	4"	"	"					29	"	ACER is 15 sec behind nav now	7.0K
								30			

pg 3 of 4 (157)

Date 1995 July 18/19 Observers Bln/Smt

Emulsion Batches:

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Comparison Exp.
CC34171	BIAS(4)			143					–
72	COMP							Fe Ar clear	60
73	HD164852	17 58 07	+20 50 00	1 50 39		3 37 W			1200
74	COMP							"	60
clock reset CG80002-5	HD207754 x4	21 46 12	+43 25						.667
CG80006/07	" x2				~230	0 11 W	88° Alt	1.0007 air mass	.133
CC34175	BIAS(4)			240					–
76	COMP							Fe Ar clear	60
77	HD172187	18 33 42	+43 08 12	2 44 05		4 02 W			1520
78	COMP							"	60
79	COMP							"	"
80	HD187691	19 46 14	+10 09 55	3 18 51		3 04 W			436
81	COMP							"	60
82	BIAS(4)			329					–
83	COMP							"	60

Spectr. Temp. ...-.000°C..... Dome Temp./Hum. 16.8°C/82.2% Transparency Conditions . partly. cloudy → clear...

Focus .....6.68.....

Spectr. Temp. ..... Dome Temp./Hum. 16.6°/83.9%

ONLY N DOME FAN ON (158)

430 0 50 1024 4 1 ccd fast

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	~~Emulsion~~	~~P.H.~~	Program	Remarks	Quality
BG 39 FILTER					1800 l/m G=4655	306μ	4463Å	1		ALCR is ~ 15 sec behind WWV now.	
								5			
15.8K	4"5"	B 5.19	B3 III					6	Blu SB		6.2K
								7			
	4-5"	V 7.32	K0 III	EEN CCD TV GUIDER		above 306μ		—	SEEING TEST	ALCR reset to WWV clock Dome W, no wind now, clear, ¼ Moon is bright, 95% cal unit 1st set with CSS 386.	
								—	"		
								1			
								8			
7900	5"	B 6.40	F0 V					9	Blu SB	Setting too low W for the seeing	8.7K
								10			
								11			
5100	4"	V 5.11	F8 V					12	IAU Std. Velocity	wind picking up again	2.2K
								13			
								14			
								15			

pg 4 of 4 (159)

Date 1995 July 18/19 Observers Bln / Smt

Emulsion Batches:

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Comparison Exp.
cc34184	HD180316	19 11 00	+27 46	3 39 25		4 17 W			1420
85	COMP							FeAr clear	60
86-88	FLAT x3					4 20 W	+28°	Tung clear	19
89	BIAS(4)			4 12					—
90/91	INBOARD/OUTBOARD					0h	+37°	FeAr clear	60/75
Smt, On July 19/20, took calibration exposures to find Bln H/B region.									

Spectr. Ten
Focus.....
Spectr. Ten

86 19
Exp Mtr
#1178

Spectr. Temp. -100.4°C Dome Temp./Hum. 16.5°C / 84.5% Transparency Conditions . clear, sky getting bright..

Focus 6.68

Spectr. Temp. ..... Dome Temp./Hum. ..... " @ FOCUS TEST

160

430 0 50 1024 4 1 ccdfast

Exp. Mtr. (36.39 FILTER)	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	~~Emulsion~~	~~P.H.~~	Program	Remarks	Quality
4000	4-5"	B 6.64	B8	CASS CCD	1800 l/mm G=4655	306μ	4463Å	16	B/m SB	cut short by sky counts	~2K
								17			
								18			15.7K
								1			
								3/4	FOCUS TEST	right in focus @ row 281 .. set a bit warm now - perfect for the night.	
				All to Perseus & DAT.							
→				CASS CCD	831 l/mm G=3267	250μ	4848Å ±1Å if Feibelman's are correct.			line identified as 4847Å falls on pixel row 514. centred using ccdfast: 295 0 50 1024 4 1 (but this seems to change every time grating is removed. I will see if grating mount repair has helped this.)	

pg 1 [Fri/Sat] (161)

Date 1995 July 21/22 Observers [illegible] {Vys}/Smt

Emulsion Batches:
.....
.....
.....

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Comparison Exp.
cc34192/93	INBOARD/OUTBOARD							FeNe clear	20/30
94	BIAS x4			21 48*					—
95	COMP							"	20
96	Vys792(B)	17 13 39	−11 00 57	21 51 22*		0 44 W			2720
97	COMP							"	20
98	BIAS x4			22 40*					—
	ACER clock reset to Smt's watch since WWV not available.								
99	COMP			22 40 for real this time				FeNe clear	20
cc34200	BD+45 2743	18 32 26	+45 39 53	22 44 09		0 17 W			1700
01	COMP							"	20
02-04	FLAT x 3					0h 1m W	+18°	Twa ½Ap	5
05	BIAS x4						"		

Spectr. Temp. -100°C ..... Dome Temp./Hum. 21.9°C/57.8% @ FOCUS TEST Transparency Conditions a few clouds.....

Focus .....6.68..... FANS OFF

Spectr. Temp. ..... Dome Temp./Hum. .....

(162)

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	~~Emulsion~~	~~P.H.~~	Program	Remarks	Quality
				CASS CCD	1800 l/m G=5235	306μ	5305Å	3/4	FOCUS TEST	415 0 50 1024 4 1 ccdfast set a bit cool for T drop	
								1		410 0 50 1024 4 1 ccdfast SUM OF 4 BIASES	
								5			
613†	3"	12.0	M					6	{Uys}	a few bits of cloud in the way, VERY WEAK, so above big cosrays, sky lines, continuum and much much more!!	
								7		†	
								1		*ACER clock is 17 minutes ahead!!!	
ASTRO clock was out the last time I checked.											
								8			
840	3"	9.83	MO					9	Marcy Std Velocity	{Uys} cosray right across 1824 spectrum diagonally @ row 482	
								10			
								11		no more safety backup	12.5K 12.0K

p1 (163)

Date 1995 July 23/24 Observers Smt. {VyS} ... [KK] as backup

Emulsion Batches:
.....
.....
.....

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Comparison Exp.
cc 34206/07	INBOARD/OUTBOARD							FeNe clear	20/35
08	COMP							"	20
09	HD 119850	13 40 36	+15 27	21 07 33		3 22 W			720
10	COMP							"	20
11	BIAS x4			21 21					—
12	COMP							"	20
13	BD+48 2108	13 15 27	+48 18 11	21 29 11		4 14 W			990
14	COMP							"	20
15	COMP							"	"
16	BD+35 2439	13 16 20	+34 48 28	21 54 13		5 00 W			2300
17	COMP							"	"
18	BIAS x4			22 35					—
CG 80008-11	HD 176844 x4	18 57 03	+40 32 36						.067
12/13	" x2	"	"		22 50	0h22m E	85° Alt	1.0046 air mass	.133
cc 34 2019-23	FLAT x5					0 15 E	+41°	Yang YZ Ap	6s
24	BIAS x4								—

Spectr. Temp
Focus
Spectr. Temp

Exp. Mtr	
1182	4
1820	
620	

Spectr. Temp. −100 Dome Temp./Hum. 21.9°C / 80.6% Transparency Conditions . Clear

Focus . . . . 6.66 @ focus test FANS ON

Spectr. Temp. . . . . Dome Temp./Hum. 20.4°C / 85.2% @ seeing test 410 0 50 1024 4 1 ccdfast

164

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	~~Emulsion~~	~~P.H.~~	Program	Remarks	Quality
				CASS CCD	1800 ℓ/mm G=5235	306μ	5305 Å	3/4	FOCUS TEST	in focus, chip still cooling from −60°C → −80°C	
								~~5~~ 8		chip not @ −100°C until 21:05	
1182	4"-5"	V 8.48	M1					~~6~~ 9	Marcy Std Velocity	V_{45} 308	1.0K
								~~7~~ 10			
								1		SUM of 4 biases.	
								5		5 DOME FAN TURNED OFF.	
1820	4"	V 8.5	M2					6	{V_{45}} 142 AB		1.8K
								7			
								11			
620		V 10.6	M0					12	{V_{45}} 47	thin wispy clouds coming in 15% catwalk humidity.	370 done W/g
								13			
								~~8~~ 1			
	3"	V 6.65	M2 III	EEV CCD TV GUIDER		above 306μ		—	SEEING TEST	Dome SW, no wind, thin wispy clouds, dome beginning to drip little from 94% on catwalk	
								—	"		
								14			14.5K → 13.6K
								1			

pg #1 (163)

Date 1995 July 27/28 Observers Smt / ~~[illegible]~~ [Rm] [Bln] as backup

Emulsion Batches: NO...RA..encoder.....

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Comparison Exp.
cc 34225/26	INBOARD/OUTBOARD							FeAr clear	60/70
27	BIAS(4)			21 10					—
28	COMP							"	60
29	HD171391	18 29 29	-11 03 19	21 22 59		1 00 E			460
30	COMP							"	60
31	COMP							"	"
32	HD173297	18 39 20	-20 45 00	21 43 51		0 35 E			1200
33	COMP							"	60
34	BIAS(4)			22 10					—
35	COMP							"	60
36	HD180583	19 12 00	+27 44 59	22 18 12		~0 45 E			901
37	COMP							"	60
38	COMP							"	"
39	HD203156	21 15 23	+37 48 55	22 45 24		~1 40 E			800
40	COMP							"	60

Spectr. Temp. -100 Dome Temp./Hum. 22.9°C/66.4% Transparency Conditions . hazy...on horizon.....

Focus ..... 6.62 .....

Spectr. Temp. ..... Dome Temp./Hum. .....

FANS OFF (164)

410 0 50 1024 4 Tcedfast

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	~~Emulsion~~	P.H.	Program	Remarks	Quality
OG 560 FILTER				CASS CCD	1800 l/mm G-6010	306μ	6400Å+	3/4	FOCUS TEST	in focus, maybe a bit soft if anything	
							6395Å	1			
							@ row 512 actually	5			
4400	5"	V 5.14	G8III					6	IAU Std Vel candidate		10K
								7			
								8			
1285	5"	<V> 7.48	~G0Ib					9	Rm	V350 Sgr, hazy here	2.7K
								10			
								1			
								11			
4400	4"-5"	<V> 6.19	F6I -IIb					12	Rm	V473 Lyr some cloud or haze.	10K
								13			
								14			
4450	4"-6"	5.8 -5.9	F2					15	Rm	V1334 Cyg seeing kept deteriorating wind ~~~!?	11.3K
								16			

pg#2 (165)

Date 1995 July 21/28 Observers [Rm] Smt ... Bln as backup

Emulsion Batches:
no RA encoder

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Comparison Exp.
cc34241	BIAS(4)			23 03					—
42	COMP							FeAr clear	60
43	HD214975	22 36 54	+56 19	23 28 05		2 50 E			1200
44	COMP							"	60
45	COMP							"	"
46	HD215159	22 38 15	+53 23 08	0 00 52		2 30 E			300
47	COMP							"	60
680014-17	HD195047 x4	20 23 54	+47 35						.067
18/19	" x2				0 18	0 03 E	86° Alt		.133
cc34248-56	FLAT x 9					0h	+23°	Tung ½ Ap	2
57	BIAS(4)			0 47					—
58/59	INBOARD/OUTBOARD					"	"	FeAr clear	60/70

CCD Spectr. Temp. -100.°C..... Dome Temp./Hum. 21.1°C / 76.4% Transparency Conditions ... hazy .....

Focus ..... 6.62 .....

CCD Spectr. Temp. -101.7°C.... Dome Temp./Hum. 20.7°C / 79.6% after seeing test

FANS OFF

410 0 50 1024 4 1 redfast

166

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	~~Emulsion~~	~~P.H.~~	Program	Remarks	Quality
OG 560 FILTER				CASS CCD	1800 l/mm G=6010	300μ	6400 Å	1			
								17			
1093	4"	<v> 8.40	~GOIb					18	Rm	Z Lac	2.9K
								19			
								20			
1750	4"	v 6.19	K2					21	Rm	Z Lac velocity comparison	5K
								22		cosmic ray	
	4-5"	7.9	GSIV	EEV CCD TV GUIDER		about 300μ		-	SEEING TEST	Dome W, no wind, ~~clear~~ hazy	
								-	"	9% cutback	
								23			11K
								1			
								24/25	FOCUS TEST		
				All to Persons & DAT							

pg 1 (167)

Date 1995 July 28/29 Observers [Rm] Smt Hdn as backup

Emulsion Batches:
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.....
.....

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Comparison Exp.
CC34260/61	INBOARD/OUTBOARD							Feather clear	60/70
62	BIAS(4)			0 50					—
63	COMP							"	60
64	HD180583	19 11 59	+27 44 59	0 57 04		2^h W			570
65	COMP							"	60
66	BIAS(4)			1 10					—
67	COMP							"	60
68	HD187691	19 46 14	+10 09 55	1 15 55		1 40 W			300
69	COMP							"	60
CC680020-23	HD207754 x4	21 49 59 1995.6	+43 51 48						.067
24/25	" x2	21 46 12 1900	+43 25		1 31	0 10 E	88° Alt		.133
CC34270-72	FLAT x3							Turn ½ Ap	2
~~73~~	BIAS(4)			1 48					—

CCD

~~Spectr.~~ Temp. ...-100...°C..... Dome Temp./Hum. 22.2°C/90.2% Transparency Conditions ...hazy & humid. 94% on catwalk

Focus .....6.62..... BOTH FANS ON 168

Spectr. Temp. ..... Dome Temp./Hum. 21.8°C/91.0% @ ~~secretest~~ 410 0 50 1024 4 1 ccdinf

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	~~Emulsion~~	P.H.	Program	Remarks	Quality
26 560 FILTER				CASS CCD	1800 l/mm G=6010	306μ	6400 Å*	3/4	FOCUS TEST		
							*6395 Å @ raw SIZ actually.	1			
								5			
2600	4"-5"	<V> 6.19	F6 I -IIb					6	Rm	V473 Lyr	7.5K
								7			
								1			
								8			
3170	4"	V 5.11	F8 V					9	19V SH Velocity		9.5K
								10			
	~~4~~ 4"-5"	V 7.32	K0 III	EEV CCD TV GUIDER		above 306μ		—	SEEING TEST	Dome W, light W wind, hazy	
								—		9% on catwalk, rained a few hours ago.	
								11			
not written to FITS.								+			
				All to Persons & DAT.							

pg 1 (169)

Date 1995 July 30/31 Observers [Rm] Smt, Hdy as backup

Emulsion Batches:
no. telescope pos'n
encoders

*ACER clock is 55 sec ahead of WWV

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Comparison Exp.
cc34273	COMP							Fe Ar clear	60
74	HD161096	17 38 32	+4 36 32	21 47 48					10
75	COMP							"	60
76	COMP							"	60
77	HD173297	18 39 20	-20 45	22 11 30					1742
78	COMP							Fe Ar clear	60 s
79	BIAS(4)			22 54					-
80	COMP							"	60
81	HD180583	19 11 59	27 44 59	23 09 41					650
* 82	COMP							"	60
** 83	COMP							"	"
84	HD331970	20 08 27	+32 34 16	23 34 21		0 05 W			1611
85	COMP							"	60
86	BIAS(4)			0 04					-
87	COMP							"	60

Spectr. Temp. ...-100.5°C... Dome Temp./Hum. 22.9°C/53.8% Transparency Conditions ...hazy only on horizon, rest good.

Focus .....6.62.....

Spectr. Temp. ..... Dome Temp./Hum. .....

FANS OFF, cops 170

410 0 50 1024 4 1 redtint

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	~~Emulsion~~	~~P.H.~~	Program	Remarks	Quality
OG 568 FILTER				CASS CCD	1800 l/mm G=6010	306μ	6395Å	5			
~~5200~~		V 2.77	K2 III CN 0.5					6	Std Vel		8K
								7			
								8			
5200		<V> 7.48	~G0Ib					9	Rm	V350 Sgr	11.9k
								B			
								1			
								11			
5125		<V> 6.19	F6I -IIb					12	Rm	V473 Lyr	
								13			
								14		~~**~~ACER clock set to WWV	
1000		V 9.1-9.8	F8-G2Ib					15	Rm	MW Cyg	24K
								16			
								1			
								17			

Pg 2 (171)

Date 1995 July 30/31 Observers [R.m.] Smt ..... Hdy as backup

Emulsion Batches:
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.....
.....

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Comparison Exp.
cc34288	HD194071	20 18 30	+27 55	0 32 57		—			900
89	COMP							Fctr clear	60
90	BIAS(4)			0 50					—
91	COMP							"	60
92	HD214975	22 36 55	+56 19	1 03 14		1 00 E			1100
93	COMP							"	60
94	COMP							"	"
95	HD215159	22 38 15	+53 23 08	1 30 19					180
96	COMP							"	60
297-305	FLAT x 9							Tung Ap	9
cc34306	BIAS(4)			2 05					—
07/08	INBOARD/OUTBOARD							Fctr clear	50/60

Spectr. Ter
Focus....
Spectr. Ter

Exp Mtr
930
928
2230

Spectr. Temp. -100°C ..... Dome Temp./Hum 20.8°C/70.1% Transparency Conditions . clear .....

Focus .....6.62.....

Spectr. Temp. ..... Dome Temp./Hum. .....

(172)

40 0 50 1024 4 1 coadd

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	~~Emulsion~~	~~P.H.~~	Program	Remarks	Quality
630	3"	V 8.13	G8III	CASS CCD	1600 l/mm G=6010	30μm	6395 Å	18	IAU Std. Vel	not really in "Magazine" but probably the FO star closest	1.5K
								19			
								1			
								20			
928		V 8.40	~G0Ib					21	Rm	Z Lac	2.4K
								22			
								23			
2230		V 6.19	K2					24	Rm	Z Lac vel. comparison	7.0K
								25			
								26			14.2K → 13.3K
								1			
								3/4	FOCUS TEST	still in focus	
				All to Perseus & DAT							

pg 1 (173)

Date 1995 July 31/Aug 1 Observers Bln / Smt

Emulsion Batches:

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Comparison Exp.
cc34309/10	INBOARD/OUTBOARD							Feth clear	40/75
11	BIAS(4)								—
12	COMP							"	60
13	HD130841	14 45 21	-15 37 34	20 52 50		2 25 W			180
14	COMP							"	60
15	BIAS(4)			20 59 30					—
16	COMP							"	60
17	HD126053	14 18 08	+1 42 36	21 08 40		3 20 W			910
18	COMP							"	60
19-21	FLAT x 3						+1°	Turq clear	22
22	BIAS(4)			21 31					—
23/24	INBOARD/OUTBOARD							Feth clear	30/75
25	BIAS(4)								—
26	COMP							"	60
27	SKY			22 51 47		0 0 0	+42°		3600

CCD
Spectr. Temp. -100.5°C Dome Temp./Hum 25.5°C/49.2% @ FOCUS TEST Transparency Conditions .. very clear

Focus ..... 6.62 / 6.64

Spectr. Temp. ..... Dome Temp./Hum. .....

(174)

410 0 50 1024 4 1 ccdbox

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	~~Emulsion~~	P.H.	Program	Remarks	max ADU Quality
BG 37 FILTER				CASS CCD	1800 l/mm G=4673	306μ	~~4463 Å~~ ±2 Å	3/4	FOCUS TEST	right in focus	
								1			
								5			
16.0K	3"	v 2.74	Am					6	Bln SB	partially obstructed by 7.5K platform/dome. 22° Alt end)	
								7			
								1			
								8			
4.6K	3"	v 6.27	GIV					9	Std. Vel	(end) 28° Alt	2.2K
								10			
								11			15.8K → 15.2K
								1			
30 FILTER				CASS CCD	831 l/mm G=3261	250μ	4845 Å (Hβ region)	3/9		285 0 50 1024 4 1 ccdbox 6.62 was too warm, 6.66 too cool by about amount, will set for 6.64.	
								1			
								12			
100								13	Bln		

Pg 2 (175)

Date 1995 July 31/Aug 1 Observers Bln/Smt

Emulsion Batches:

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Comparison Exp.
CC34328	BIAS (4)								—
29	SKY			23 55 35		0 00	+42°		3600
30	BIAS (4)								—
31	SKY			0 59 40		"	"		3600*
32	BIAS (4)								
33	COMP							Feb clear	60
34-36	FLAT x 3							Tung clear	5
CG80026-29	HD214946 x4	22 36 42	+44 29						.067s
30/31	" x2				2 37	0 17 W	87° Alt		.133s
CC34337/38	INBOARD/OUTBOARD							Feb clear	40/75
39	BIAS (4)			3 09					—
40	COMP							"	60
41	HD214946	22 36 42	+44 29	3 13 30		1 33 W			2400
42	COMP							"	60
43	BIAS (4)			3 57					—
44-46 47	FLAT x 3 BIAS (4)					0° 0m	+44°	Tung clear	22 —

Spectr. Temp. --100.°C.... Dome Temp./Hum. 23.0°C/66.1% Transparency Conditions ..clear.....

Focus .....6.64.....

Spectr. Temp. ..... Dome Temp./Hum. 21.9°C/77.4% @ SEEING TEST

FANS OFF 176

285 0 50 1024 4 1 ccdfst.

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	~~Emulsion~~	P.H.	Program	Remarks	Quality
				CASS CCD	831 ℓ/mm G=3261	250μ	4845Å	1			
89							(Hβ region)	14	Bin		
								~~B1~~			
90								15	Bin	* GPIB error @ 1 54 and exposure ended prematurely by 5 minutes.	
								1			
								16			
								17			12.2K →11.7K
	2"	B 7.26	A5	EEV CCD TV GUIDER		above 306μ		—	SEEING TEST	Dome W, no wind, hazy now.	
	•	•	•					—		85% catwalk	
3G 39 FILTER				CASS CCD	1800 ℓ/mm G=4723	306μ	4463Å	18/19	FOCUS TEST	T= 21.6°C, FOCUS = 6.64 in focus!	
								1			
					6 hours ago it was 4673!			20			
2830	2"	B 7.26	A5					21	Bin SB	a few clouds now → increasing cloud.	1.5K
								22			
				All to Persons & DAT				1			
											19.5K →HOK

pg 177

Date 1995 Aug 1/2 Observers [Bln] Smt Hdy as backup

Emulsion Batches:

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Comparison Exp.
cc34348/49	INBOARD/OUTBOARD							FeAr clear	40/75
50	BIAS(4)			23 13					—
51	COMP							"	60
52	HD164852	17 58 07	+20 50 00	23 59 38		2 33 W			1005
53	COMP							"	60
54	BIAS(4)			0 21					—
55	COMP							"	60
56	HD172187	18 33 42	+43 08 12	0 28 44		2 40 W			1810
57	COMP							"	60
58	BIAS(4)			01 00					—
cc80032-35	HD207754 x4	21 46 12	+43 25						.067
36/37	" x2				1 16	0 10 E	88° Alt		0133
cc34359	COMP							FeAr clear	60
60	HD192518	20 10 08	+28 23 30	1 32 01		2 22 W			2480
61	COMP							"	60

CCD Spectr. Temp. −100.5°C Dome Temp./Hum. 27.9°C / 76.9% @ FOCUS / TEST Transparency Conditions . clear. now 178

Focus . . . . 6.64 FANS OFF

Spectr. Temp. . . . . Dome Temp./Hum. 20.7°C / 81.5% once dome opened. 410 0 50 1024 4 1 ccdfat.

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	~~Emulsion~~	P.H.	Program	Remarks	Quality
BG 39 FILTER				CASS CCD	1800 l/mm G=4585	30μm	4463 Å	3/4	FOCUS TEST	Dome closed. set a bit cool.	
								1			
								5			
7570	6"	B 5.19	B3IV					6	B/n SB	seeing very bad, spectrum very spread out across cds	3.2K
								7			
								1			
								8			
4680	5"	B 6.40	F0V					9	B/n SB	thin cloud here.	
								10		ACER clock was fine @ start but is now 6 minutes fast.	
								1		ACER clock reset to WWV	
	4"	7.32	K0III	EEV CCD		above 30μm		–	SEEING TEST	Dome W, thin clouds increasing 94% on catwalk, no wind, [illegible] by the end. T = 20.1°C RH = 85%	
		"	"	TV GUIDER				–	"		
								11			
3800 ~~2700~~	?	B 5.36	A7IVm					12	B/n A-shell*	very cloudy here. spectrograph controller reset itself during exposure.	1.5K
								13			

pg 2 179

Date 1995 Aug 1/2 Observers [Bln] Smt Bln as backup

Emulsion Batches:

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Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Comparison Exp.
cc34362	COMP							Feb clear	60
63	HD210459	22 05 33	+32 41 15	2 24 49		0 59 W			1200
64	COMP							"	60
65	BIAS(4)								-
66-74	FLAT x 9					1 03 W	+33°	Tung clear	22
75/76	INBOARD/OUTBOARD							Feb clear	40/75

Spectr. Tem

Focus

Spectr. Tem

Exp. Mtr

940

CCD
Spectr. Temp. -100.5°C Dome Temp./Hum. 19.8°C/86.9% Transparency Conditions. mostly cloudy /80

Focus 6.64

Spectr. Temp. Dome Temp./Hum. 19.9°C/86.1% @ focus test 410 0 50 1024 4 1 ccdfast

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	~~Emulsion~~	P.H.	Program	Remarks	max ADU Quality
				CASS CCD	1800 l/mm G=4585	306μ	4463 Å	14			
940	?	B 4.75	F5III					15	Bln Astell K	cloud on and off, more cloud than not by the end	400 above b/g
								16			
								1			
								17		clock drive off now	14.7 K →
								3/4	FOCUS TEST	just a bit warm now, at end of night. : set perfectly	
			All to Reserve & DAT								

Pg# 181 Wed / Thurs

"Ripple Tests" of Flats

Emulsion Batches:

Date 1.9.95 Aug. 2/3 Observers [Blank] To / Smt

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Comparison Exp.
CC343 77/78	Inboard / Outboard			20 59		00 00	+41 08	FeAr clear	40/75
CC34379	BIAS(4)					"	"		—
CC343 80/82	FLATS x3			21 06		0h 0m	+41°	TUNG clear	22sec
LOST → 83	Comp			21 1046		"	"	FeAr clear	60s
84-86	FLATS x 3			21 17		0h 0m	+0° 3'		22sec
87	BIAS(4)			2125		"	"		
88	Comp			2127		"	"	FeAr clear	60s
89-91	FLATS x 3			21 33		4h 0m W	+28° 5'	TUNG clear	22s
92	BIAS(4)					"	"		—
93	COMP			21 39		"	"	FeAr clear	60
94-96	FLAT x 3			21 50		4h 0m E	+28° 5'	TUNG clear	22
97	BIAS (4)			21 53		"	"		—
98	COMP			21 56		"	"	FeAr clear	60
99/400	Inboard / Outboard			2159		"	"	FeAr clear	40/75
401/402	"			22 17		4h 0m W	+28° 8'	"	"

CCD Spectr. Temp. -100.°C ..... Dome Temp./Hum. +22.0°C 71.6%H Transparency Conditions ... Cloudy - dome closed..

Focus set. 6.67 ..... 90c gain

Spectr. Temp. ..... Dome Temp./Hum. .....

c Lambda

182

ADU MAX

410 0 50 1024 47 CCD FMT

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	~~Emulsion~~	P.H.	Program	Remarks	Quality
T= 21.6°C		6.67 set)		CASS CCD	1800 l/mm G=4585	306u	4463Å	3/4c;	focus test		
								1/2c;			
								5c;		position not in FITS header	15.3K
								6c;		CCDT= -101.7°C LOST	
								7c;		pos'n in comment field (15.3K)	
								1/2		Lustone (+14.6K)	
								8			
								9		pos'n in HA & DEC fields. →	19.9K
								1		CCDT= -101.7°C	
								10			
								11		spec. controller reset before this set (new table with such a move)	15.3K → 15.2K
								1			
								12			
T= 21.4°C								13/14	focus test	same as zenith focus	
T= 21.3°C								15/16	"	1 pixel shift in pos'n from last test same as zenith focus.	

pg 42 183

Date 1995 Aug 2/3 Observers [BG] Tu/Smt

Emulsion Batches:

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Comparison Exp.
CC3403/04	Inboard/outboard			223459		000	000054	FeAr Clear	40/75
05/06	" "			224536		000	+11 4812	"	"
07	BIAS(4)					"	"		
1) 08	Comp			225407		"	"	FeAr Clear	60s
09/11	FLATS x3			2257		"	"	TUNG Clear	22s
12/13	Inboard/outboard @ 4500Å			2305		"	"	FeAr Clear	40/75 60s
2) 14	BIAS(4)								
15	Comp			2312				FeAr Clear	60s
16/18	FLATS x3	[Not done by usual "Repeat Flat...Bat"]				"		TUNG Clear	20s
19/20	Inboard/outboard @ 4535Å							FeAr Clear	40/60
3) 21/23	FLATS x3	"Not done by Repeat Batch," ie individually fixed						TUNG Clear	18s
24	BIAS(4)								
25	Comp							FeAr Clear	60s
26/27	Inboard/outboard @ 4570							"	40/60
(4) 28-30	FLATS x3							TUNG Clear	17s
31	BIAS(4)								—

CCD
Spectr. Temp. −101·3°C ..... Dome Temp./Hum. +21·3°C ..... 74·8% Transparency Conditions ..... Cloudy ..... out .....

Focus ... 6.6.7 .....

Spectr. Temp. ..... Dome Temp./Hum. .....

184 max

c Lambda

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
21.3°C		Set 6.67		CASSCCD	1800 l/mm G=4585	306	4463A	17/18	focus test	Note we had to go	
+21.3°C				START of "Test #1"			"	19/20	" "	Back to West and 0° decposing for focus	
							"	1/2			
							"	21			
							"	22			15.5K → 14.7K
					1800 l/mm G=4610		4500A	23/24	focus test		
							"				
							"	25			(15.1K 14.9K
							"	26			
T=+21.1°C					1800 l/mm G=4635		4535A	23/24	focus test		
								27			(15K →14.7)
								1/2			
								28			
					1800 l/mm G=4660		4570	23/24	focus test		1
								22			15.6K →14.8K
								1			

Pg #3 185

Date 1995 Aug 2/3 Observers [Blm] Tn/Smt

Emulsion Batches:

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Comparison Exp.
cc34432 (4)	COMP			23 56		$0^h\ 0^m$	$+41^\circ\ 48'$	FeAr clear	60
33/34	INBOARD/OUTBOARD	HARTMANN				"	"	"	40/60
(5) 35-37	FLAT x 3					"	"	Tung clear	15s
38	BIAS(4)			0 15		"	"		—
39	COMP					"	"	FeAr clear	60
40/41	INBOARD/OUTBOARD	HARTMANN				"	"	FeAr clear	40/70
42-44	FLAT x 3			1 31		"	"	Tung clear	13s
(6) 45	BIAS(4)			1 33		"	"		—
46	COMP					"	"	FeAr clear	60

CCD
Spectr. Temp. −101.7°C Dome Temp./Hum. 21.1°C / 77.2% Transparency Conditions cloudy.. dome closed....

Focus ..... 6.67 .....

Spectr. Temp. ..... Dome Temp./Hum. .....

186

410 0 50 1024 4 1 ccdfint

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
60				CASS CCD	1800 ll/m G=4660	306μ	~4570Å	25			
40/60	T = 21.1°C				1800 ll/m G=4685		~4610 Å	23/24	FOCUS TEST	seeing to be in focus still.	
15s								26			15.2K →14.3K
–								1			
60								27			
40/70	T = 21.0°C				1800 ll/m G=4710		~4650 Å	23/24	FOCUS TEST		
13s								28			14.9K →14.3K
–								1			
60								29			

Pg#1 Sun/Mon 187

Date 1995 Aug 6/7 Observers [Blo]./.Dby/.Tn

Emulsion Batches:

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Comparison Exp.
cc3447/48	inboard/outboard						+30°	FeAr Clear	60/100
49	BIAS(4)								
50	Comp							FeAr Clear	60s
51	HD158352	17:23:44	00°:24':42"	22:23:21		0210 W			1884s
52	Comp							FeAr Clear	60s
53	Comp							FeAr Clear	60s
54	HD 138629	15:28:12	41°:14':19"	23:17:33		0445 W			882s
55	~~HD148283~~ Comp							FeAr Clear	60s
56	Bias(4)			23:36					
57	Comp							FeAr Clear	60s
58	HD148283	16:21:50	+37° 37' 18"	23:45:28		0430 W			1576s
59	Comp							FeAr Clear	60s
60	Comp							FeAr Clear	60s
61	HD152614	16:49:17	+10° 20'	00:21:48		0424W			712s
62	Comp							FeAr Clear	60s
63	BIAS(4)			00:38:15					

CCD
Spectr. Temp. −100°C Dome Temp./Hum. +20°C .77% Transparency Conditions Light Clear

Focus 6:6.7

Spectr. Temp. Dome Temp./Hum. C Lamp Hole

188

90Cgain
410 0 50 1024 4 1 CCDFAST

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	~~Emulsion~~	P.H.	Program	Remarks	Quality
T (early evening) −21.8°				CASS CCD	1800 l/mm G-4585	306u	4463A	3/4	focus		
BG39 Filter								1 1/2			
								5			
14900		5.46	A8V					6	A shell Bln/Wide		6.3K
[redacted]								7			[redacted]
[redacted]		[redacted]	[redacted]					8		After Sp control reset	
16100	3"	B=5.09	A5V					9	A shell Bln/Wide	(>.300/1 S/N)	11K
								10			
									CCD T=−101.2°C		
		V=5.52 ↓	A5V ↓					11			[redacted]
14000	3"5							12	A shell Bln/Wide		6.6K
								13			
								14			
11600		B=4.90	B8V					15	Bln		5K
								16			

Pg 42 (189)

Sun/Mon

Date 1995 Aug 6/7 Observers [Bln]/Dby/Tn

Emulsion Batches:

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Comparison Exp.
64	Comp					(From HA circle)	(Dec circle)	FeAr Clear	60s
65	HD 164577	17:56:41	+1° 18' 00	00:45:29		03 42W	+01 20		834s
66/67	Comp							FeAr Clear	60s
68	HD 164852	17:58.1	+20° 49' 60"	01:05:08		04 12W			1374s
69	Comp							FeAr Clear	60s
70	BIAS(4)								
71	Comp							FeAr Clear	60s
72	HD 180316	19:11:00	+27° 46' 00"	01:40:15		03 59 W			2907s
73	Comp							FeAr Clear	60s
74	Bias (4)								
75	Comp							FeAr Clear	60s
76	HD 192518	20:10:08	+28° 23' 30"	02:41:23					846s
77	Comp							FeAr Clear	60s
78-86	Flats x 9					0 0	+30°	Tung Clear	22s
87/88	inboard / outboard					"	"	FeAr Clear	60s/100s
89	Bias (4)								

CCD
~~Spectr~~. Temp. -99.8°C Dome Temp./Hum. +17.9°C +82.8 Transparency Conditions Part Clear (1.90)

Focus 6.67

Spectr. Temp. Dome Temp./Hum. +17.4°C +87% Rapid Clearing in and Humidity rise.
(Lambda)

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	~~Emulsion~~	P.H.	Program	Remarks	Quality
BG39 Filter				CASS CCD	1800lu/mm G-4585	306μ	4463Å	17			
14800		B= 4.46	A1V					18	Bln	(Not doubled)	7.5K
								19/20			1.5K
15000	4"	B= 5.19	B3IV					20	Bln		9K
								22			
										CCDT = -100.2°C	
								23			
7315		B= 6.64	B8					24	Bln		3.9K
								25			1.3K
								26			
2225		B= 5.36	A7IV					27	A Shell Bln-Vde	= 140/1 S/N	1.1K
								28			~~0.8K~~
								29		CCDT = -100.5°C	15.2K
									focus		

191

pg#1 Mon/Tues

Date 1995 Aug 7/8 .... Observers [Blz] ... T.n .....

Emulsion Batches:

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Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Comparison Exp.
CC344 90/91	Inboard / outboard Hartmann			≈ 2018		00 21 W	+42°	FeAr clear	60/100
92	BIAS(4)								
93	Comp							FeAr clear	60s
94	HD152614	16 4917	+10 19 48	20 3243		00 49 W			1407
95	Comp							FeAr clear	60s
96	BIAS(4)			2059					
97	Comp							FeAr clear	60s
98	HD154528	17 0054	+77 48 00	21 1252		01 45 W			
99	Comp							FeAr clear	60s
CG800 38/41	HD176844	18 5703	+40 3236	≈2211		≈00	+40°	4×	67ms
42/43	"							2×	133ms
CC34500	Comp							FeAr clear	60s
501	HD164852	17 5807	+20 50	22 2804		01 42 W			1755
502	Comp							FeAr clear	60s
503	BIAS(4)								

CCD
Spectr. Temp. −100.2°C ..... Dome Temp./Hum. +20.5°C 75%H Transparency Conditions Part. cloudy .....

Focus ... 6.70 .....

Spectr. Temp. ..... Dome Temp./Hum. +19.0°C 84.5%H

90 Cgain

410 0 50 1024 4 1 CCDFmT

192

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
BG39 Filter				CASS CCD	1800 l/mm G=4585	30μ	4463Å	3/4	focus test		MAX ADU
								1/2			
								5			1.3K
13,700	2-3"	B 4.30	B8V					6	B/n-SB	>3001 S/N thin cloud here	8.4K
								7			1.3K
								1/2	CCD Temp	−100.5°C	
								8			1.3K
3,200	2-3"	V 6.66	A0					9	SB-B/n	getting too cloudy	2.2K
								10			1.3K
	3"	V 6.65	M2III	EEV CCD TV guider		ABOVE 30μ slit			Seeing test	some cloud (medium E wind) NO FANS, Dome facing west T=20.0°C H=84%H	
								10			1.3K
9,700	3"	B 5.19	B3IV					11	SB-B/n	some cloud	5.5K
								12			1.3
								1/2			

pg #2 Mon/Tues 193

Date 1995 Aug 7/8 Observers [illegible] TA

Emulsion Batches:

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Comparison Exp.	Exp. Mtr
CC34504	Comp							FeA Clear	60s	
05	HD172187	18 33 42	+43 08 12	23 06 58		01 56 W				230
06	Comp							FeA Clear	60s	
07	Comp							4	60s	
08	HD187691	19 46 14	+10 09 55	23 53 49		01 04 W			847	1350
09	Comp							FeA Clear	60s	
10/18	~~BIAS(4)~~ FLATS x 9					01 08 W	+10 25	TUNG Clear	22s	
19	BIAS(4)									
20	Comp							FeA Clear	60s	
21	HD210459	22 05 33	+32 41 15	00 41 53		00 12 E			1719	1750
22	Comp							FeA Clear	60s	
23	Comp							"	"	
24	HD204867	21 26 18	-06 00 40	01 26 16		Approx 01 W			410	1440
25	Comp							FeA Clear	60s	
26/27	inboard/outboard	Hartmann				00 00	+20°	FeA Clear	60/100	
28	BIAS(4)									

CCD Spectr. Temp. ~100.8°C ..... Dome Temp./Hum. +19.°C ... 84.6% Transparency Conditions * P.M.A.T. Cloudy 1994

Focus ....6.70.....

Spectr. Temp. ..... Dome Temp./Hum. +18.6°C 90% H - getting worse

c Lambda

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	~~Emulsion~~	P.H.	Program	Remarks	Quality
				CASSCCD	1800l/m G=4585	306	4463Å	13			PM AT ADY
2500	2"-3"	B 6.40	F0V					14	SE Blu	* Two cloudy parts pushed HERE	1.5K
								15			
								16			1.3K
1,650	3"-4"	V 5.11	F8V					17	stdVel	cloudy	850
								18			
								~~19~~			14.5K
								1/2		CCD= -101.7°C	
								20			1.3K
11,750	3"	B 4.75	F5III					21	Vida A star		7.2K
								22			
								23			
8,000		V 2.91	G0Ib					24	StdVel		4K
								25			
								26/27	focus test		
								1/2			

pg #1 195 -

Date 1995 Aug. 9/10. Observers [Rm.] Smt.....

Emulsion Batches:

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Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Comparison Exp.
cc34529/30	INBOARD/OUTBOARD HARTMANN							FeAr clear	45/60
31	BIAS(4)								
32	COMP							"	60
33	HD161096	17 38 32	+4 36 32	20 48 57		0 02 W			60
34	COMP							"	60
35	COMP							"	"
36	HD180583	19 11 59	+27 44 59	20 59 52		1 10 E			630
37	COMP							"	60
38	BIAS(4)			21 15					—
39	COMP							"	60
40	HD187691	19 46 14	+10 09 55	21 25 12		1 25 E			310
41	COMP							"	60
42	COMP							"	"
43	HD173297	18 39 24	-20 45	21 43 32		0 20 W			1560
44	COMP			22 15				"	60
45	BIAS(4)			22 17					—

CCD
Spectr. Temp. -100°C Dome Temp./Hum. 21.4°C / 70.3% @ FOCUS TEST

Transparency Conditions clear @ start., partly cloudy pretty full moon

Focus 6.6#3 Spectr. Temp. Dome Temp./Hum. 19.9°C

196

410 0 50 1024 4 Tracks

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	~~Emulsion~~	P.H.	Program	Remarks	Quality
OG 560 FILTER				CASS CCD	1800 ℓ/mm G = 5942	306μ	6396 Å	3/4	FOCUS TEST		
								1			
								5			
4200		V 2.77	K2 III CN 0.5					6	Std. Vel.	cloudy here	12.7K
								7		clouds moving up fast from the south	
								8			
3560		V 6.19	F6 I -IIb					9	Rm	V473 Lyr in some cloud	10.5K
								10			
								1			
								11			
4700		V 5.11	F8 V					12	Std. Vel.	clear now	12.7K
								13			
								14			
2870	4"	V 7.48	n60 Ib					15	Rm	a few faint sky lines V350 Sgr clear here too a bit late due to spec controller resets.	5.8K
								16			
								1		clouding in now	

pg#2 197

Date 1995 Aug 9/10 Observers [Rm] Smt

Emulsion Batches:
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Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Comparison Exp.
cc3454 6 -54	~~COMP~~ FLAT x 9					$0^h\,0^m$	+14°	Tung ½4p	2s

CCD
~~Spectr.~~ Temp. ~100.4°C Dome Temp./Hum. 20.2°C / 73.2% Transparency Conditions . mostly cloudy

198

Focus 6.63

Spectr. Temp. Dome Temp./Hum.

410 0 50 1024 4 1 ccdfmt

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	~~Emulsion~~	~~P.H.~~	Program	Remarks	Quality
				CASS CCD	1800 l/m G=5942	300μ	6396 Å	17		dome closed.	11.8K →11.4K

pg#1 SAT Sun 199

Date ..1995 Aug 12/13.... Observers [Rm] T.+/Sm.+.....

Emulsion Batches:

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2 BIG SAT Night Tours... M13 & Ring Nebula

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Comparison Exp.
CC3455/56	inboard/out board						+33°	Fe Ar clear	45/60
57	BIAS(4)								
58	Comp		* note correction	+ (Header may also be WRONG this time)				Fe Ar Clear	60
59	HD173297	18 39 24	+20 45	22 49 44		1 24 W			765
60	COMP		−2045 Tu					"	60
61	COMP							"	"
62	HD180583	19 11 59	+27 44 59	23 12 46		1 12 W			525
63	COMP							"	60
64	COMP							"	60
65	HD331470	20 08 27	+32 34 16	23 31 48		1 15 W			2913
66	COMP							"	60
67	BIAS(4)								—
68	Comp							Fe Ar clear	60
69	HD187691	19 46 14	+10 09 55	00 31 49		1 51 W			180
70	Comp							Fe Ar clear	60

Spectr. Temp. ~100.°C ..... Dome Temp./Hum. +20.2°C..69.3%H Transparency Conditions .. Mostly clear, just past full moon. 200

Focus .. 6.6.6 ..... 90Cguide

Spectr. Temp. ..... Dome Temp./Hum. +19.0°C..74.8%H 410 0 50 1024 4 1 ccdfast

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
OG 560 FILTER				CHSSCCD	1800 l/mm G=5942	306u	6396 Å	3/4	focus/test	grating unchanged from previous night of observing	
								1/2			
								5			
1060		<V> 7.48	~G0Ib					6	Rm	V350 Sgr a few sky lines very low/wisps	1.9K
								7			
								8			
3630	3'-4"	<V> 6.19	F6I-IIb					9	Rm	V473 Lyr	
								10			
								11			
1;240	3-4"	V 9.1-9.8	F8-G2Ib					12	Rm	MW Cyg ≤ 170/1 S/N hot pixel streaked across column 8 pixels east from spectrum	
								13			1.8K
								1/2		CCD T= -99.9°C	
								14			2.0K
3050		V 5.11	F9I					15	Std Vel		4.5K
								16			

Pg#2 SAT/Sun 201

Date 1995 Aug 12/13 Observers [Rm] Tn/Sm+

Emulsion Batches:

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Comparison Exp.
(c3457)	COMP							FeAr clear	60
72	HD203156	21 15 23	+37 48 55	0 44 01		00 39W			430
73	COMP							"	60
74	COMP							"	"
75	HD214975	22 36 55	+56 19	1 00 24		0 01 E			1929
76	COMP							"	60
77	BIAS(4)			1 36					—
78	COMP							"	60
79	HD215159	22 38 15	+53 23 08	1 44 52		0 14 W			280
80	COMP							"	60
81	Comp							"	60
82	HD180583	19 11 59	+27 14 59	1 59 03		4 00 W			551
83	Comp							FeAr Clear	60
84	Comp							"	"
85	HD187691	19 46 14	+10 09 55	2 15 33		3 36 W			226
86	Comp							FeAr Clear	60

Spectr. Temp. -100°C Dome Temp./Hum. 19.0°C / 75.0% Transparency Conditions clear, just past full moon...

Focus 6.66

Spectr. Temp. ..... Dome Temp./Hum. 18.5°C 79.5%

202

410 0 50 1024 4 1 ccd4

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	~~Emulsion~~	P.H.	Program	Remarks	Quality
		V		CASS CCD	1800 ℓ/mm G=5942	306μ	6396Å	17			
4000		5.8 - 5.9	F2					18	Rm	V1334 Cyg	8.5K
								19			
								20			
1730	3"-4"	V 8.40	~60Ib					21	Rm	Z Lac	4.0K
								22			
								1			
								23			
3420	3"4"	V 6.19	k2					24	Rm	Z Lac vel. comparison	
								25			
								26			2K
3600	4"	V 6.19	F6I-IIb					9	Rm	2nd exp of night V473 Lyr	
								27			
								14			
3300	4"	V 5.11	F8V					15	std vel	2nd exp of night	
								16			

Pg#3 SAT/Sun 203

Date 1995 Aug 12/13 Observers [illegible]

Emulsion Batches:

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Comparison Exp.
CG 800 44/47	HD223094	23 41 30	+2809					4x	67ms
48/49	"	"	"			00 06E		2x	133ms
cc 34587	BIAS(4)								
88	Comp							Fe/Ar Clear	60s
89	HD223094	23 41 30	+2809	02 36 42		00 05W			545
90	Comp							Fe/Ar Clear	60s
91	Comp							"	"
92	Var Per	02 20 19	+582806	030010		1 29 E			3030
93	Comp							Fe/Ar Clear	60s
94	BIAS(4)			3 55					—
95	COMP							"	60
96	HD25361	3 56 42	+58 23	3 59 54		2 47 E			614
97	COMP							"	60
98	COMP							"	"
99	HD30282	4 41 06	+36 32	041719		3 11 E			660

CCD
Spectr. Temp. ....-100.7°C.... Dome Temp./Hum. ....18.4°C.... 79.8% Transparency Conditions Clear, just past full moon.

Focus ....6.66.....

Spectr. Temp. ..... Dome Temp./Hum. ..... Lambda

204 max

Exp. Mtr.	Seeing	PV Mag.	Sp.	Inst.	Grating/ Tilt	Slit	~~Emulsion~~	P.H.	Program	Remarks	Quality
	4"	7.45	K5III	~~CASS~~ CCD ~~EEV~~ TV GUIDER	ABOVE SLIT	306u		—	Seeing test	Done SW, NE from cen	
								—	Done in Singlo	DOS window C:\Bin\ FG	
				CASS CCD	1800l/mm G=5982		6396Å	1/2			
								17			~~20K~~
3100		7.45	K5III					18	Std Vel		
								19			
								20			18K
417	4-5"	10.8 -11.66	~~F5~~ -F9					21	Rm	very faint.	700 Above Background
								22			
								1			
								23			
1900		V 7.30 -8.01	F6Ib-G2Ib					24	Rm	RX Cam	5.5K
								25			
		B						26			
2020	4"	7.9-8.8	FG-G1					27	Rm	AW Per	4.8K

Pg #4 SAT/Sun 205

Date 1995 Aug. 12/13 Observers [Rm] Ja/Sant

Emulsion Batches:

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Comparison Exp.	Exp. Mtr.
CC 3+600	Comp							Feat Clear	60s	
601-607	FLATS x ~~97~~					≃03 E	+36°	Tung Ap 1/2	2s	
~~08~~	~~INBOARD/OUTBOARD HARTMANN~~							~~Feat Clear~~	~~45/60~~	
08	BIAS(4)								—	
09/10	INBOARD/OUTBOARD HARTMANN					"	"	Feat Clear	45/60	

Spectr. Temp. ..... Dome Temp./Hum. 17.9°C ... 78.8% Transparency Conditions .. Fine .....

Focus .... 6.66 .....

Spectr. Temp. ..... Dome Temp./Hum. .....

206

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	~~Emulsion~~	P.H.	Program	Remarks	Quality
60s				CASS CCD	1800 l/mm G=5942	306u	6396A	28			
2s								29c.			127K → 116K
~~3 45/60~~								~~3/4 FOCUS FLAT~~			
—								1			
45/60								3/4			
				All to Perseus & DAT							

pg#1 Tues/Wed [Rm] 207

Date 1995 Aug 15/16 ... Observers ..I.n.....

Emulsion Batches:
.....
.....

* Accu Time Reset. It was ...5 mins ahead.....

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Comparison Exp.
CC346 11/12	inBOARD/outBOARD					0029W	+26°	FeAr clear	15/60
13	Comp							FeAr2 clear	60s
14	HD171232,	182830	+252500	205233		0000			1317
15	Comp							FeAr clear	60s
16	BIAS (4)								
CG800 50/53	HD171232	18 28 30	+25 25 00	21 20		0002W		4x	.067s
CG800 54/55	"	"	"	21 22				2x	.133s
CC346 17	Comp							FeAr Clear	60s
18	HD175797	18 39 24	−20 45 00	21 29 42		0024W			1381
19	Comp							FeAr Clear	60s
20	HD175797 Comp	18 39 24	−20 45 00	21 57 48		0051W		*	1149
21	Comp							FeAr Clear	60sec
22	BIAS (4)			22 22					
23	Comp							FeAr Clear	60s
24	HD180583	19 11 59	+27 44 59	22 30 43		0043W			645
25	Comp							FeAr Clear	60s

CCD Spectr. Temp. −100.2 °C Dome Temp./Hum. +24.3°C 61.4%H Transparency Conditions Slightly hazy & cloudy. Not bad though

Focus 6.6.0 90c gain 208

CCD Spectr. Temp. −100.6°C Dome Temp./Hum. +22.3°C 66.5%H c Lambda 410 0 50 1024 4 1 CCDFMT

Exp. Mtr.	Seeing	Pix. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
OG 560 Filter				**	1800 l/mm G=5942	306u	6396A	3/4	focus test	** Grating presumably untouched from previous night, spectrograph control failures leave "G" filt blank	
								5			
	3"	7.73	G8III					6	Std Vel (encoders)	* Restuated and set Time Right	2.8K mAA ADU
								7		Also normalized on this star.	
								1/2		CCDT = −100.5°C	
	2-3"	7.73	G8III		ABOVE	306u	Slit		Seeing test	NO FANS, No Wind * Dome SW	
	* (Actually, a good NORTH wind that I didn't note at the time)										
								8c			
570	4"	7.48	F6I-IIb → G0Ib		Note that previous night's COORD were Hand entered and Dec was not CORRect in Log book			9c	Rm Pgm	PART cloudy here too cloudy to expend	500AA Above Background
								10			
420	3-4"	7.48	F6I-IIb → G0Ib					9c	Rm Pgm	Clearing here now (Mostly)	
								11c			
								1/2			
								12			
3450	3"	6.19	F6I-IIb					13	Rm Pgm		67K
								14			

Pg#7 Tues/Wed (209)

Date 1995 Aug 15/16 Observers [RM] JR

Emulsion Batches:

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Comparison Exp.	Exp Mtr.
CC34626	Comp							FeAr Clear	60s	
27	HD203156	21 1523	+37 48 53	22 56 01		00 55 E			547	3600
28	Comp							FeAr Clear	60s	
29	Comp							"	"	
30	HD214975	22 36 55	+56 18 4	23 15 44		01 38 E			1629	7060
31	Comp							FeAr Clear	60s	
32	BIAS(4)			23 45 00						
33	Comp							FeAr Clear	60s	
34	HD215159	22 38 15	+53 23 08	23 50 32		01 26 E			408	3540
35	Comp							FeAr Clear	60s	
36/44	FLATS x9					01 20E	+54°	TUNG Ap 1/2	2s	
46/47	In board/out board HARTMAN					"	"	FeAr Clear	45/60	
45	BIAS(4)			00 12						

Spectr. Temp
Focus ... 6
Spectr. Temp

Spectr. Temp. ..... Dome Temp./Hum. 12.2°C 66.9%H Transparency Conditions .. PART Cloudy .....

Focus ... 6.60 .....

CCD
~~Spectr~~. Temp. = 100.3°C. Dome Temp./Hum. 12.4°C 65.3%H
Cumbola

210 HOU MAX

Exp. Mtr.	Seeing	Pg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	~~Emulsion~~	P.H.	Program	Remarks	Quality
				CHSSCCD	1800l/mm G=5942	30μ	6396Å	15			
3600	3"	5.8 - 5.9	F2					16	Rm pgm		8.1K
								17			20K
								17			1.7K
2000	2"-3"	8.40	nGOJ6					18	Rm pgm		3.9K
								19			4.6K
								1/2			
								20			1.5K
3500	3"	6.19	K2					21	Rm Std Vel for HD214975		7.2K
								22			
								23			17.8K
								24/25			
								1/2			

pg#1 [Wed/Thur] (21)

Date 1995 August 16/17 Observers [Bln] Smt .... Hdy. as. safety

Emulsion Batches:

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Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Comparison Exp.
cc 34648/49	INBOARD/OUTBOARD	HARTMANN						Fea clear	40/75
50	BIAS(4)								—
51	COMP							"	60
52	HD172187	18 33 42	+43 08 12	21 36 51		0 36 W			800
53	COMP							"	60
54	COMP							"	"
55	HD138629	15 28 12	+41 14 19	22 01 22		4 00 W			500
56	COMP							"	"
57	BIAS(4)			22 12					—
58	COMP							"	60
59	HD148283	16 2 50	+37 37 18	22 19 32		3 35 W			930
60	COMP							"	60
61	COMP							"	"
62	HD154528	17 00 54	+77 48	22 55 04		3 34 W			700
63	COMP							"	60
64-83 84	FLAT & 20 BIAS(4)							Tung clear	22

CCD Spectr. Temp. -100°C ..... Dome Temp./Hum. 24.9°C / 50.7% (@ FOCUS TEST) Transparency Conditions . cleared up .....

Focus .....6.64..(a bit cool) Spectr. Temp. ..... Dome Temp./Hum. 23.5°C / 68.1% (@ FLATS)

FANS ON

416 0 50 1024 4 1 1 cdfm

(212)

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	~~Emulsion~~	P.H.	Program	Remarks	ADU max Quality
Bg 39 FILTER				CASS CCD	1800 l/mm G=4585	306μ	4466 Å	3/4	FOCUS TEST	set a bit cool, T should drop	
							(was 4463 Å previously for this tilt G=4585)	1			
								5			
7600	3"	B 6.40	FOV					6	Bln SB	normalized here.	5.0K
								7			
								8			
12.6K	1.5" variable 5"	B 5.09	AS V					9	Bln A-shell *	centred @ col 21, rack must've been centred	9.5K
								10			
								1			
								11			
12.1K	4"	B? V=5.52	AS V					12	Bln A shell *	centred on col 21 again!	7.2K
								13			
								14		S FAN OFF NOW Telescope on E side of piers	
2.1K	4"	6.66	AO					15	Bln SB	cloudy S & zenith, cloud creeped up - cut short	1.8K
								16		GPIB error : this one a bit late	
								17		Telescope W side, close	35K →

pg #1 [Fri/Sat] (213)

Date 1995 August 18/19 Observers {Uys} {Smt} ..... Iks as backup

Emulsion Batches:
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Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Comparison Exp.
CC34685/86	INBOARD/OUTBOARD							FeNe clear	20/35
87	BIAS x 4								—
88	COMP							"	25
89	BD+45 2743	18 32 26	+45 39 53	20 51 31		NO 30 W			1860
90	COMP							"	25
91	BIAS x4			21 25					—
92	COMP							"	25
93	BD+27 2853 (C?)	17 33 15	+27 57 16	21 40 42		2 15 W			2480
94	COMP							"	25
95	BIAS x 4			22 45					
96	BIAS x 4			23 30					
~~96~~	~~COMP~~							"	25
	~~AC+8 147-294~~	~~19 30 16~~	~~+8 14 48~~	~~23 36 23~~	ABORTED DUE TO	ACER			
697-704	FLAT x 8							Tung 1/2 Ap	5s
CC34705	COMP							FeNe clear	25
06	AC+8 147-294	19 30 16	+8 14 48	23 36 23		2 09 W			2201
07	COMP							"	25

Spectr. Temp. -100.5 °C Dome Temp./Hum 24.9°C/60.1% @ FOCUS TEST Transparency Conditions .. hazy..get..clear, NO moon

Focus ... 6.62 214 BOTH DOME FANS ON

Spectr. Temp. ..... Dome Temp./Hum. ..... 416 0 50 1024 4 1 ccdfst

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	~~Emulsion~~	P.H.	Program	Remarks	Quality
NO FILTER				CASS CCD	1800 ℓ/mm G=5153	306μ	5302Å	3/4	FOCUS TEST	set too cool, ~~F~~ @ 6.64 changed to 6.62.	
								1			
								5			
806	4"	V 9.83	MO					6	Marcy Std. 61.	V_{45} 182A	540 above 6/4
								7			
								1			
								8			
372	~~4~~"	V 11.8	MO ρ					9	{V_{45}}	cols: 21-25 27-33 V_{45} 795C + V_{45} 775	150 above 6/4
								10			
								#1		ACER reset.	
								3			
CCD3	PROBLEMS 4" ~~10.1~~ MO							4	{V_{45}}	~~cracked~~ again — ccd3 V_{45} 811A ACER reboot	
								1			11.9K → 11.1K
								3			
670	4"	V 10.4	MO					4	{V_{45}}	V_{45} 811A after lots of computer problems	~200 above 4/4
								5			

Pg #2 215

Date 1995 August 18/19 Observers Smt. {Uys} ... Iks as backup

Emulsion Batches: .....

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Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Comparison Exp.	Exp Mtr
CC34708	BIAS x4			0 15					—	NE FILTER
09	COMP							FeNe clear	25	
10	AC+18 1074-63	22 23 56	+18 25 18	0 25 45		0 05 W			2200	522
11	COMP							"	25	
12	BIAS x4			1 06					—	
13	COMP							"	25	
14	BD+23 4575 C	22 32 41	+23 24 52	1 14 27		1 24 W			4500 cps!	375
15	COMP							"	25	
16	BIAS x4			2 33					—	
17	COMP							"	25	
18	HD216899	22 51 48	+16 02	2 37 07		1 22 W			600	752
19	COMP							"	25	
20	BIAS x4			2 56						
CG8005-59	HD3765 x4	0 35 18	+39 40						.067	
60/61	" x2				2 58	0 11 E	86° Alt		.133	

Spectr. Temp. -.100..... Dome Temp./Hum. 21.5°C/71.7% Transparency Conditions hazy, hz moon.....

Focus .....6.62.....

Spectr. Temp. ..... Dome Temp./Hum. 21.0°C/72.4% @ seeing test

ONLY N DOME FAN ON (216)

416 0 50 1024 4 1 ccdfast

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	~~Emulsion~~	P.H.	Program	Remarks	Quality
NO FILTER				CASS CCD	1800 Rlm G=5153	30μm	5302 Å	1			
								6			
522	3.5"	V 10.7	M0					7	{V45}	V45 841 356 hung up while ~200 above Autoguider in progress. Hg	
								8			
								1			
								9			
375	3"	V 12.2	K8					10	{V45}	Jupiter at 2 close V45 893 C less haze now 50 above moon in trees Hg	
								11			
								1			
								12			
752	4"	V 8.66	M2					13	Marg Std Vel	V45 854 CCD starting to warm -99.0°C at end. 300 above Hg	
								14			
								1		~~top~~	
	4"	V 7.36	dK5	EEV CCD TV GUIDER		above 30μm		–	SEEING TEST	Pure W, clear, no more haze last ½ moon just rising above trees, no wind	
	"	"	"					–			
									CCD down top up, then →		

Pg #3 217

Date 1995 August 18/19 Observers {Vogt} Smith Hldy as backup

Emulsion Batches:
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Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Comparison Exp.
cc34721	COMP							FeNe Clear	25
22	AC+9 2-34	0 13 08	+9 38 50	3 25 20		1 29 W		"	3000
23	COMP							"	25
24	BIAS x 4			4 20					—
25	COMP							"	25
26	HD1326	0 12 42	+43 27	4 26 57		1 50 W		"	600
27	COMP							"	25
28/29	INBOARD/OUTBOARD					0h 0m	+44°	"	20/35

Spectr. Temp. -100.4°C Dome Temp./Hum. 19.7°C/71.9% Transparency Conditions clear, lost ¼ Moon up now

Focus 6.62 BOTH FANS OFF NOW. 218

Spectr. Temp. ..... Dome Temp./Hum. 19.3°C/67.6% 416 0 50 1024 4 1 redfast

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	~~Emulsion~~	~~P.H.~~	Program	Remarks	Quality
NO FILTER				CASS CCD	1800 g/mm G=5153	30μm	5302Å	15			
594		V 10.4	MO					16	{V45}	V45 356	250 2 4
								17			
								1			
								18			
1610	4"	V 8.07	MIXe					19	Marcy Std Vel	V45 85A stay getting brighter.	1.36
								20			
								21/22	FOCUS TEST		

pg. #1 SUN/MON 219

Date 1995 Aug 20/21 Observers [Bln]/Dby/Tn

Emulsion Batches:

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Comparison Exp.
cc34730 -31	inboard/out								
32	BIAS(4)								
33	Comp							FeAr Clear	60s
34	HD138629	15:28:12	41°14'19"	20:12:27		0244 W			1248s
35	Comp							Clear FeAr	60s
36	Comp							Clear FeAr	60s
37	HD187691	19:46:14	10°09'55"	20:47:50					1300s
38	Comp							Clear FeAr	60s
39	Bias(4)								
40	Comp							Clear FeAr	60s
41	HD 152614	16:49:17	10°19'48"	21 18 51		02 18 W			721s
42	Comp							FeAr Clear	60s
43	Comp							FeAr Clear	60s
44	HD158352	17:23:44	00°24'42"	21:39:56		0227 W			2247
45	Comp							FeAr Clear	60s
46	Bias(4)								

CCD
~~Spectr.~~ Temp. -100.7°C Dome Temp./Hum. +14.8°C, +78.8 Transparency Conditions Hazy

Focus 6.62 90C gain 220

~~Spectr.~~ Temp. -100.7°C Dome Temp./Hum. +22.8, +78.8 CCDFMT MAX HOG

Clambda 4.0 0 50 1024 4 1

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	~~Emulsion~~	P.H. Ci	Program	Remarks	Quality
				CASS CCD	1800 l/mm G=4585	306μ	4463	3/4	focus		
								1/2			
								5			13K
7044		B=5.09	A5V					6	A-Shell 3In/wide	≈ 200/1 S/N Clouded over real fast.	
								7			
								8			
9498		V 5.11	F8V					9	Std Vel.		4.3K
								10			
								1/2			
								11			
16300		B +30	B8V					12	SB Bln	>300/1 S/N	8.7K
								13			
								14			
15898	3-4"	B 5.66	A8V					15	A-Shell Bln/wide		6.3K
								16			
								1/2			

pg. #2 Sun/mon (221)

Date 1995 Aug 20/21 Observers [Bln]/Dby./Tn

Emulsion Batches:

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Comparison Exp.
cc3474 7	Comp							FeAr Clear	60s
48	HD164577	17:56:41	01° 18' 27"	22:26:44		02 22 W			1076
49	Comp							FeAr Clear	60s
50	Comp							"	60s
51	HD164852	17 58 07	+20 50 00	22 51 59		02 46 W			1060s
52	Comp							FeAr Clear	60s
53	Bias (4)								
54	Comp							FeAr Clear	60s
55	HD172187	18:33:42	43° 08' 12"	23:18:42		03 09 W			2434
56	Comp							FeAr Clear	60s
57	Comp							FeAr Clear	60s
58	HD 180316	19 11 00	+27 46 00	00 07 22		~~03 W~~			2735
59	Comp							FeAr Clear	60s
CG800 67/65	HD 214946	22 36 42	+44 29 00					4x	67m
~~60~~ 68/67	Bias (4)					00 04 W		2x	133m
60	~~BIAS (4~~								

CCD
Spectr. Temp. ....-100:7.... Dome Temp./Hum. +22.8 ,... +78·8 Transparency Conditions ...Hazy / v.v.t. cloudy.....

Focus .....6.62.....

CCD
Spectr. Temp. ....-100:7..... Dome Temp./Hum. +20.1°C ....73.2% H

C Lambda

222 MAX

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
BG 39 Filter probably used (Tu Sept 95)				CASS CCD	1800 l/mm G=4585	306u	4463Å	17			
16,000	4"	B 4.46	A1V					18	Bln SB		72k
								19			
								20			
15415	3-4"	B 5.19	B3IV					21	SB Bln		7.2k
								22			
								1/2			
								23			
9675	3"-5"	B 6.40	F0V					24	SB Bln		4.4k
								25		CCDT = -101.7°C	
								26			
7344	4"-5-7"	B 6.64	B8					27	SB Bln	cloud at end	3k
								28			
		B 7.26	A5		ABOVE	306u slit			Seeing test	In and out of cloud	
Done outside of windows. No usual encoder info in headers								1/2	" "	Medium NNW wind	
									Humidity	dropping fast	

pg#3 Sun/Mon 223

Date 1995 Aug 20/21 Observers [illegible] T.n./Rdg

Emulsion Batches:

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Comparison Exp.
CC 34760	BIAS(4)								
61	Comp							FeAr Clear	60s
62	HD214946	22:36:42	44°29'00"	01 11 18		00 55 W			2797s
63	Comp							FeAr Clear	60s
64	Comp							FeAr Clear	60s
65	HD192518	20: 10:08	28°23'30"	02:05:48		03 54 W			1382s
66	Comp							FeAr Clear	60s
67	Bias (4)								
68	Comp							FeAr Clear	60s
69	HD 210459	22:05:33	32°41'15"	02:37:52		02 17 W			60s
70	Comp							FeAr Clear	60s
71	Comp							FeAr Clear	60s
72	HD154528	17:00:54	77°48'00"	02:59:40		08 27 W			2669
73	Comp							FeAr Clear	60s
74	BIAS(4)								

CCD
Spectr. Temp. -100.7 Dome Temp./Hum. 20.1°C 72.4% Transparency Conditions .. PART. Cloudy

Focus 6.62

Spectr. Temp. Dome Temp./Hum. 18.7°C 63.8%

224

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
				C4SCCD	1800 l/mm G=4585	30u	4463A	1/2			
								29			
3794	5"	B 7.26	* A5					30	8B Bln	Spectrum looks "late"? (many narrow lines) PART Cloudy again	1.7K
								5			
								7			
16278	6"	B 5.36	A7 IV					9	A-shell Wde/Bln		4.6K
								10			
								1/2		CCDT -100.6°	
								11			
16035		B 4.75	F5 III					12	A-shell Wde/Bln		
								13			
								14			
7000	5-8"	V 6.66	A0					15	~~Std Vel~~ 5B2 Bln		
								16			
								1/2			

Plate 225

Date 1995 Aug 20/21 Observers [B.h] Th./Pbg

Emulsion Batches:

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Comparison Exp.
cc34775	Comp							FeAr Clear	60s
76	HD 9138	01 24 57	05 37 42	03 56 40		00 16W			604
77	Comp							FeAr Clear	60s
78-97	Flat(22) x20					00 35W	+6 06	Tung	22s
98	Comp							FeAr Clear	60s
99	HD 214946	22:36:42	44°29'00"	04:34:56		W			64/s
cc34800	Comp							FeAr Clear	60s
01/02	inboard/outboard	Hartman				0 0	+44°	FeAr Clear	60/100

Spectr. Tem
Focus... 6
Spectr. Tem

Exp. Mtr.
7850

CCD
Spectr. Temp. −100.3°C ..... Dome Temp./Hum. ..... Transparency Conditions .. fine .....

Focus ... 6.62 .....

Spectr. Temp. ..... Dome Temp./Hum. 11.8°C ... 65% H

226 MAX

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
				CHSS CCD	1500 l/mm G=4585	306u	4463Å	16			1.3A
7850	8"	✓ 4.84	K4III					17	Stibel		
								19			15.2K
								22	~~Hoot~~	~~cc~~	
								22		CCDT = −99°C	
1290		B 7.26	A5					23	SB Bln	(extra to reject spectrum 1st exp #34762	
								24			
								3/4			

pg #: Mon/Tues (227)

Date 1995 Aug 21/22 Observers [KK]/Jn./Smt.

Emulsion Batches:
.....
.....
.....

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Comparison Exp
CE09446	Hartmann - IN							ThA	10
9447	Hartmann - OUT								10
9448	Hartmann - IN			14:07				ThA	10
9449	Hartmann - OUT								10
CE09450	Hartmann - IN			1941				ThA	10
9451	Hartmann-OUT							ThA	10s
9452	BIAS(4)					0315W	+2907		
53	COMP							ThAr	5
54	HD137909	15 23 42	+29 27 01	21 29 21 ~~20 27 21~~		>4h W			1070 ~~1100~~
55	COMP							"	5
56	BIAS(4)								
57	Comp							ThAr	4s
58	ADS11046A	18 0024	+02 32	22 0045		01 46 W			500
59	Comp							ThAr	4s
60	ADS 11046 B	"	"	2211 24		0205 W			1001
61	Comp							ThAr	4s

CCD

Spectr. Temp. −100.3°C ..... Dome Temp./Hum. +23.5°C ... 51.0% Transparency Conditions ... Fine, but gusty

Focus .... 1.245 .....

Spectr. Temp. ..... Dome Temp./Hum. +20.3°C ... 56.5% Lambda

90 cgain

228

CCD Fmt for Focus

0 0 128 1024 8 1

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	X Grating/ Tilt	Slit	~~Emulsion~~	~~P.H.~~	Program	Remarks	Quality
				echelle 18.02	300 l/mm .579	60μ = .277 400μ length = .225	6300 Å ?			0 0 256 1024 4 1 T = 21.0 F = .245	MAX
											404
				echelle reset to 17.92	300 l/mm .579		~6300 Å			0 0 128 0 1024 8 1 T = +23.5	
										T = +23.5° (was +25 WARMER EARLIER)	
										Good for slightly cooler Temp.	
CCD T =		−100.6°C						1/2		CCD Fmt 0 0 256 1024 4 1	
								3			
~~TOS~~	4"	3.66	Fp					4	KK	BCBr	MAX 78K
								3			
								3			
184	* 3"	4.20	KQV					4	KK Vis Ban	NORTH and Bright Star * Seems well separated	3K
								3			
90	3'4"	5.99	KQV					5		Faint and slightly (HARD to separate)	1.3K
								3			

pg #2 Mon/Tues 229

Date 1995 Aug 21/22 Observers [KH]/Jn./Sat

Emulsion Batches:

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Comparison Exp.
ce09462	ADS11046A	18 0024	02 3200	22 3011		2.16W			500
63	Comp							ThAr	4s
64	BIAS(4)			2240					
65	Comp							ThAr	4s
66	ADS13256A	19 5642	+10 2800	224751		0 53W			1436
67	Comp							ThAr	4s
68	ADS13256B			231400		1 24W			1700
69	Comp							ThAr	4s
70	ADS13256A			234442		1 50W			1430
71	COMP							ThAr	4
72	BIAS(4)			0 11					—
73	COMP							ThAr	4
74	HD187691	19 46 14	+10 09 55	0 19 12		2 33 W			1300
75	COMP							ThAr	4
76	BIAS(4)			0 42					—

Spectr. Temp. -100.4°C Dome Temp./Hum. +19.7°C 56% H Transparency Conditions Fine 230

Focus .245

Spectr. Temp. Dome Temp./Hum. 2 0 0 256 1024 4 1 1Mx 1Mx

Exp. Mtr.	Seeing	Plt. Mag.	Sp.	Inst. Tilt	X Grating/ Tilt	Slit	~~Emulsion~~	P.H.	Program	Remarks	Quality
143	3"	4.20	KO V	echelle 17.92	300 l/mm .579	60μ W 100μ H	6300Å	4 c1	KK Vis Bin	OK separation for guiding	
								3 c1			
								1/2			
								3			
5	3"	7.60	F2					6	KK Vis Bin	good separation Bright Hor and Sou H	450
								3			
0	4"	7.80	Not indicated					4	KK Vis Bin	Looks obviously faint (Only 150 ADU above Background)	
								3			
0		7.60	F2					6	"	same strength as faint star	
								3			
								1			
								3			
101	5"	✓ 5.11	F8 V					5	Std. Vel.	really close to last pair.	1.4K
								3			
								1			

Pg #3 Mon / Tues (231)

Date 1995 August 21/22 Observers [KK] T.A./Smit

Emulsion Batches:

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Comparison Exp.
cc09477	COMP							ThAr	4
78	HD8890 A	01 22 34	+88 46 26	0 55 05		3 59 E			222
79	COMP							"	4
80	HD8890 A			01 01 17		3 51 E			360
81	COMP							"	4
82	HD8890 A			1 09 12		3 40 E			525
83	COMP							"	4
84	COMP							"	"
85	HD197964	20 42 01	+75 45 50	01 26 29		2 38 W			900
86	COMP							"	"
87	HD197963			1 44 47		3 06 W			1500
88	Comp							ThAr	4s
89	HD197964			2 12 11		3 21 W			900
90	Comp							ThAr	4s
91	BIAS (4)			2 29					—

Spectr. Temp. -101.7°C Dome Temp./Hum. +18°C 66% H Transparency Conditions. hazy. & still. gusty.

Focus ~~245~~ 232

Spectr. Temp. ..... Dome Temp./Hum. ..... 0 0 256 1024 4 1 ccdfmt

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	CCD Inst.	X Grating/ Tilt	Slit	~~Emulsion~~	P.H.	Program	Remarks	Quality
				ECHELLE 17.92	300 l/mm ~~0.577~~	60μ W 400μ H	6300 Å	3			
542		V=2	F8 Ib		.579			4	KK	Δ RA 00 18 19 for 4th of E Δ Dec −00 01 21	6.0K
	4"-5"	~~V=2~~	~~F8 Ib~~					3			
610		1	"					4	KK		6.0K
		"	"					3			
738		"	"					4	KK		8.1K
								3			
								3			
130		V 4.50	K1 IV					5	KK Vis Bin	ADS 14279 A, brighter & SE	2.0K
								3			
82	5"	V 5.50	F7 V					5	KK Vis Bin	losing the seeing even more	
								3			
130	5"	V 4.50	K1 IV					5	KK Vis Bin		
								3			
								1			

Pg #4 233 Mon / Tues

Date 1995 August 21/22 Observers [KK]/Tn./Smt

Emulsion Batches:

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Comparison Exp.	Exp Mtr
ce09492	COMP							ThAr	4	
93	HD201091	21 02 25	+38 15 27	2 36 51		3 29 W			945	107
94	COMP							ThAr	4	
95	HD201092	21 02 26	+38 15 14	02 54 20		3 51 W			1214	55
96	Comp							ThAr	4s	
97	HD201091	21 02 25	+38 15 27	03 16 43		4 09 W			930	84
98	Comp							ThAr	4s	
99	BIAS(4)			3 34					—	
ce09500	comp							"	4s	
01	ADS15600A HD209791	22 00 54	+64 08 00	3 45 08		3 38 W			777	17
02	COMP							"	4	
03	ADS15600B			4 00 11		4 02 W			1300	1
04	COMP							"	4	
05	HD209791 ADS15600A			4 24 03		4 14 W			600	55
06	COMP									

CCD
Spectr. Temp. ~1006°C Dome Temp./Hum. 17.3°C/68.7% Transparency Conditions hazy 234

Focus .245

Spectr. Temp. Dome Temp./Hum.

FANS OFF

0 0 256 1024 4 1 ccdsht

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst. CCD	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
				ECHELLE 17.92	300 g/mm ~~577~~ .579	400μH 60μW	6300 Å	3			
107	4"	5.22	K5 V					4	KK Vis Bin	brighter & NW, AOS14636A	2.2K
								3			
65	3-4"	6.04	K7 V					5	KK Vis Bin	fainter one AOS 14636B	1.4K
								3			
84	3-4"	5.22	K5 V					4	KK Vis Bin		
								3			
								1			
								3		Telescope on E side.	
77	4"	4.80	A3m					6	KK Vis Bin	brighter & E, AOS15600A	1.8K
								3			
1	4"	5.30	dF7					6	KK Vis Bin	seems much fainter than 5.30, ch, some cloud here	1400 area q
								3			
55		4.80	A3m					6	"		1.3

p45 235

Date 1995 August 21/22 Observers [kk] / Tn / Smt

Emulsion Batches:

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Comparison Exp.
ce09507	BIAS(4)			4 36					—
08	Comp							ThAr	45
09	HD8890A	01 22 34	+88 46 26	5 44 13		0 09 E			120
10	COMP							ThAr	4
11	HD8890 A			5 47 29		0 05 E			120
12	COMP							ThAr	4
13	HD8890 A			5 51 03		0 02 E			120
14	COMP							ThAr	4
15/21	FLATS x 7			5 01		3 35 W	+35	TUNG	2
22/23	INBOARD/OUTBOARD	HARTMANN				"	"	ThAr	5/5

Spectr. Ter
Focus....
Spectr. Ter
Exp. Mtr

Spectr. Temp. ccd −101.7°C Dome Temp./Hum. 16.4°C/63.8% Transparency Conditions hazy / thin cloud

Focus 245

Spectr. Temp. ccd −101.7°C Dome Temp./Hum. 16.1°C 64.0%H dawn almost here.

236

0 0 256 1024 4 1 ccdfast

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst. CCD	X Grating/ Tilt	Slit	~~Emulsion~~	~~P.H.~~	Program	Remarks	Quality
				ECHELLE 17.92	300 l/mm ~~579~~	60μ W 400μ H	6300Å	1			
								3			
245	4"	2	F8I6					4	KK		3.6K
								3			
235		2	F8I6					4	KK		3.2K
								3			
225		2	F8I6					4	KK		3.3K
								3			
								2			15.9K
								1/8	FOCUS TEST	0 0 128 1024 8 1 ccdfast T=15.9°C set just a bit warm	
				To Perseus & DAT							

pg #1 237 Tues/Wed

Date 1995 August 22/23 Observers [kk] Tn/Smt

Emulsion Batches:

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Comparison Exp.	Exp. Mtr.
cc09524/25	INBOARD/OUTBOARD	HARTMANN				02 45 W	+20°	ThAr	4/14	
26	BIAS(4)									
27	Comp							ThAr	4s	
28	HD131156	14 46 46	+19 30 57	20 04 50		3 11 W			693	177
29	Comp							ThAr	4s	
30	ADS 9413B	14 46 46	+19 30 57	20 18 18		3 42 W			1726	31
31	Comp			20 59				ThAr	4s	
32	HD131156	14 46 46	+19 30 57	21 00 19 ~~20 45 33~~		4 10 W			892	193
33	Comp							ThAr	4-	
34	BIAS(4)								—	
35	COMP							ThAr	4	
36	HD137909	15 23 42	+29 27 01	21 23 00		3 47 W			330	173
37	COMP							ThAr	4	
38	HD137909			21 30 32		3 55 W			330	27
39	COMP							ThAr	4	

Spectr. Temp. -100 Dome Temp./Hum. 19.0°C/58.3% Transparency Conditions clear

Focus 243 90 cg gain 230

Spectr. Temp. Dome Temp./Hum. c doubly ci

Exp. Mtr.	Seeing	Pg. Mag.	Sp.	CCD Inst.	X Grating/ Tilt	Slit	~~Emulsion~~	~~P.H.~~	Program	Remarks	Quality
				ECHELLE 17.92	300.8 l/m .579	60u by 400u H	6300Å			0 0 128 1024 8 1 ccdfast	
								1/2		0 0 256 1024 4 1 correct	
								3			
171	3"	4.74	G8 V					4	Vis Bin kk	ADS 9413A	3.3K
								3			
31	2"4"	6.90	K5 V					5	Vis Bin kk	ADS 9413B fe:hiters GPIB/I/O errors & finally a Hdr. bus reset. Lost original comp. This one is 10 minutes later.	
								1			
133	4"	4.74	G8 V					2			2.8K
								3			
								1			
								3			
173	4"	3.66	Fp					4	kk B CBr		1.9K
								3			
217								4	"		2.9K
								3			

pg #2 23C1 Tues/wed

Date 1995 August 22/23 Observers [KK]/Tn/Smt

Emulsion Batches:

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Comparison Exp.	Exp Mtr
c09540	HD137909	15 23 42	+29 27 01	21 38 17		4 02 W			175	
41	COMP							ThAr	4s	
42	BIAS(4)			21 46					-	
43	COMP							ThAr	4s	
44	HD154906 ADS10345A	17 03 15	+54 36 07	21 56 22		02 52 W			860	70
45	Comp							ThAr	4s	
46	HD154905 ADS10345B	17 03 15	+54 36 07	22 12 56		03 11 W			1035	100
47	Comp							ThAr	4s	
48	HD154906 ADS10345A	17 03 15	+54 36 07	223407		03 31 W			955	80
49	Comp							ThAr	4s	
50	BIAS(4)									
51	Comp							ThAr	4s	
52	ADS12889A	19 41 48	+33 22 00	230650		01 37 W			174	1
53	Comp							ThAr	4s	
54	ADS12889B	19 41 48	+33 22 00	23 3758		2 10 W			1830	0
55	Comp							ThAr	4s	

Spectr. Temp. ..... Dome Temp./Hum. 16.6°C/66:1% Transparency Conditions ..clear - slightly hazy.....

Focus .....243..... 240

Spectr. Temp. ..... Dome Temp./Hum. .....

0 0 256 1024 4 1 ccdfast

Exp. Mtr.	Seeing	Pr. Mag.	Sp.	Inst. CCD	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
175	4"	3.66	Fp	ECHELLE 17.92	300 l/mm .579	60μm W 400μm H	6300Å	3	KK β CBr		27K
45								4			
—								1			
45								3			
70	4"-3"	5.65	F7V					5	KK Vis Bin	The NE of pair ~~split~~ Hand b separate sometimes)	1.4K
45								3			
100	3"	5.70	F					6	KK Vis Bin	good separation ie seeing better	1.7K
45								3			
60	3"	5.65	F7V					5	KK Vis Bin	separation OK The NE one again	
45								3			
								1			
45								3			
1	2"-4"	8.3	K3V					2	KK Vis Bin	NE slightly west North, (slightly brighter?)	max 570
45								3			
0	3"	8.4						4	K Vis Bin	The south one	
45								3			

Pg# 3 (241) Tues/Wed

Date 1995. Aug. 22/23 Observers [K.K.] Tu./Sun.

Emulsion Batches:

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Comparison Exp.
09556	ADS12889A	19 41 48	+33 22 00	0 13 08		2 44 W			1760
57	COMP							ThAr	4
58	BIAS(4)			0 46					—
59	COMP							ThAr	4
60	HD187691	19 46 14	+10 09 55	0 52 05		3 02 W			850
61	COMP							ThAr	4
62	Comp							"	"
63	ADS15971A HD213052	22 23 41	-0 31 56	1 14 21		0 49 W			518
64	Comp							ThAr	45
65	ADS15971B HD213051	"	"	1 25 03		0 59 W			1012
66	Comp HD213052	"	"					ThAr	45 / 1
65	Comp			1 54 26				ThAr	4
66	ADS15971B HD213051	22 23 41	-0 31 56	1 58 06		1 31 W			900
67	COMP							ThAr	4

CCD
~~Spectr~~. Temp. −100.3 °C Dome Temp./Hum. 15.7°C / 70.8% Transparency Conditions . clear → some thin clouds

Focus . . 213

Spectr. Temp. . . . . Dome Temp./Hum. . . . . cLumbly

242

Exp. Mtr.	Seeing	Pix. Mag.	Sp.	Inst. Echelle tilt	Grating/ Tilt	Slit	~~Emulsion~~	~~P.H.~~	Program	Remarks	Quality
0	3"	8.3	K3 V	17.92	300 l/mm .579	60u W 100u H	6300Å	4	KK Visbin		mean 480 U 575 — 420 obs 575
								3			
								1			
								3			
73	3"	5.11	F8 V					5	Std. Vol		105K
								3			
								3			
175	4"-5"	4.31	F3 V					6	KK Vis Bin	poor separation NORTH one	24K
								3			
90	3½"	4.51	F					4		South one LOST	
								3		(more ACQR/CCD3 Hangups) GPIB problems. Reset Hue. La	
								1		So much for seeing.	
106	4"	4.51	(BSC) F2 TV					2	KK Vis Bin	barely separable - sometimes blended together - not surprising though since sep in Y is < 2".	4.0K!
								3			

pg #4 243

Date 1995 August 22/23 Observers [KK] Tn/Smt

Emulsion Batches:

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Comparison Exp	Exp Mtr
ce09568	(ADS15971A) HD213052	22 23 41	-0 31 56	2 16 58		1 42 W			365	11
69	COMP							ThAr	4	
70	BIAS(4)			2 28					-	
71	Comp							ThAr	4	
72	HD224635 ADS17149A	23 5424	+33 1000	02 36 42		0 40 W			970	19
73	Comp							ThAr	4	
74	HD224636 ADS17149B	23 5424	+33 1000	02 54 49		0 56 W			800	53
75	Comp							ThAr	4	
76	HD224635 ADS17149A	23 5424	+33 1000	03 12 06		1 13 W			806	57
77	Comp							ThAr	4	
78	HD224636 ADS17149B	"	"	3 29 14		1 41 W			1422	40
79	COMP							ThAr	4	
80	HD224635 ADS17149A	"	"	3 55 12		1 56 W			797	54
81	COMP							ThAr	4	
82	BIAS(4)			4 09					-	

Spectr. Temp. ..... Dome Temp./Hum. 14.9°C/75.0% Transparency Conditions some thin clouds, elsewhere it's clear

Focus .....243.....

Spectr. Temp. ..... Dome Temp./Hum. ..... clamber

(244)

Exp. Mtr.	Seeing	~~Prg.~~ Mag.	Sp.	CCD Inst. ECHELLE	Grating/ Tilt	Slit	~~Emulsion~~	P.H.	Program	Remarks	Quality
111				17.92	300 ℓ/mm .579	60μM 400μM	6300Å	4	KK Vis Bin		1.6K
								3			
								1			
								3			
49	2-3"	6.50	GOV					5	KK Vis Bin	SE ~~ pretty good separation	1.7K
								3			
52	2-3"	6.70	(OSC) GOV					5	KK Vis Bin	NW	1.2K
								3			
57		6.50	GOV					5	KK Vis Bin	SE ~~	
								3			
40		6.70	GOV					5	"	lots of re-focussing at start good separation again 1.5K	
								3			
54		6.50	GOV					5	"		1.2K
								3			
								1			

pg #5 245

Date 1995 August 22/23 Observers [kk]/Tn./Sm.t.....

Emulsion Batches:
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.....

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Comparison Exp.
ce09583	COMP							ThAr	4
84	HD8890 A	1 22 34	-88 46 26	4 16 21		0 32 E			141
85	COMP							ThAr	4
86	HD8890 A			4 20 28		0 28 E			117
87	COMP							ThAr	4
88	HD8890 A			4 24 02		0 23 E			154
89	COMP							ThAr	4
90	COMP							"	4
91	HD3712	0 34 50	+55 59 20	4 32 03		1 40 W			94
92	COMP							ThAr	4
93	HD3712			4 35 11		1 43 W			81
94	COMP							ThAr	4
595-601	FLAT x 7					1 47 W	+56°	Tung	2
ce09602/03	INBOARD/OUTBOARD	HARTMANN				"	"	ThAr	4/14
604	BIAS(4)			4 57					—

CCD
Spectr. Temp. -100.7°C. Dome Temp./Hum. 15.2°C/14.8%. Transparency Conditions some clouds

246

Focus .243

Spectr. Temp. ..... Dome Temp./Hum. .....

0 0 256 1024 4 1 ccdfit

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	CCD Inst.	Grating/ Tilt	Slit	~~Emulsion~~	P.H.	Program	Remarks	Quality
				ECHELLE 17.92	300 l/mm 8.579	400μ H 60μ W	6300 Å	3			
550	4"	2	F8I6					6	KK	a bit of cloud.	10 K
								3			
522	3"	"	"					6	KK	no cloud.	10 K
								3			
455	3"	"	"					6	KK	most of cloud so far was thin	~10 K
								3			
								3			
410	3"	2.23	kO III a					4	Std Vel.	sky getting bright now	9K
								3			
907		2.23	"					4	Std. Vel		
								3			
						600μ H 60μ W		3			13 5K
						1100μ H 60μ W		7/8		0 0 128 1024 8 1 ccdfit → T = 15.4°C F = .243 ~~focus~~ focus nicely	
				All to ~~Exabyte~~ EXABYTE (last night's too)		D: 1		1		0 0 256 1024 4 1 ccdfit	

19 #1 247 Wed / Thurs

Date 1995 August 23/24 Observers [KK] / Tn / Smt

Emulsion Batches:
echelle rotated 90°
(spectrograph)

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Comparison Exp.
ce09605/06	INBOARD / OUTBOARD	HARTMANN				2 34 W	+23°	ThAr	4/9
07	BIAS (4)			2024					
08	Comp							ThAr	4
09	HD137909	15 23 42	+29 27 01	20 27 59		3 02 W			630
10	COMP							ThAr	4
11	HD137909			20 41 07		3 12 W			545
12	COMP							ThAr	4
13	HD137909			20 51 57		3 23 W			552
14	Comp							ThAr	4
15	Comp							4	4
16	HD146361 ADS9979 A	16 10 9	+34 07	21 06 11		3 00 W			1127
17	Comp							ThAr	4
18	HD146362 ADS9979 B	"	"	21 27 49		3 32 W			1757
19	Comp							ThAr	4
20	HD146361 ADS9979 A	"	"	21 58 59		3 51 W			977
21	Comp							ThAr	4

CCD
Spectr. Temp. −100.7°C Dome Temp./Hum. 23.1°C / 60.1% Transparency Conditions . clear . . . getting gusty
@ FOCUS TEST

Focus 250 248

Spectr. Temp. . . . . Dome Temp./Hum. . . . . .

Exp. Mtr.	Seeing	~~V Pig.~~ Mag.	Sp.	Inst. CCD	X Grating/ Tilt	(N-S Slit)	~~Emulsion~~	~~P.H.~~	Program	Remarks	Quality
* Reset echelle Tilt to →				ECHELLE 17.92	300 ℓ/mm .579	60μ W 400μ H	6300 Å	1/2	FOCUS TEST	0 0 128 1024 8 1	-.36
May have been 18.42 previous nights (check actual frames)								1		0 0 256 1024 4 1	
								3			
197	3"	3.66	Fp					4	kk β CBr		6.5K
								3			
156		3.66	Fp					4	kk β CBr		4.7K
								3			
168	3"	3.66	Fp					4			5K
								3			
								3			
50	>5"	5.58	GO V					2	kk Vis Bin	Separation OK double star NE and brightest	
								3			
3		6.59	GI V					2	kk Vis Bin	SW and fainter	1.3K
								3			
23	>5"	5.58	GO V					2	"	NE and brighter	
								3			

Pg #2 249 Wed Thurs

Date 1995 August 23/24 Observers [illegible]/Tn/Smt

Emulsion Batches:
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.....
.....

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Comparison Exp.
cc09622	BIAS(4)			22 17					—
23	COMP							ThAr	4
24	(ADS10418A) HD156014	17 10 05	+14 30 15	22 26 55		3 06 W			218
25	COMP							ThAr	4
26	(ADS10418B) HD156015	17 10 05	+14 30 15	22 33 17		3 16 W			435
27	COMP							ThAr	4
28	(ADS10418A) HD156014	17 10 05	+14 30 15	22 44 43		3 26 W			323
29	COMP								4
30	Comp							ThAr	4
31	HD222368	23 34 48	+5 05 03	~~22 56 44~~ 23 12 35		~~2 51 E~~ 2 25 E			~~88~~ 480 ~~82~~
32	COMP							ThAr	4
33	BIAS(4)			23 24					—
34/40	FLATS x 7			00 58		02 40W	+8 40	Tung	2s
41	BIAS(4)								
42	Comp							ThAr	45

Spectr. Temp. ..... Dome Temp./Hum. 21.8°/4/65.4 Transparency Conditions Some clouds, windy.....
→ mostly cloudy.
Then Rain
Focus .....250.....
~~Spectr~~ CCD Temp. ..... Dome Temp./Hum. .....
0 0 256 1024 4 (ccd first (250)

Exp. Mtr.	Seeing	~~V~~ Pig. Mag.	Sp.	CCD Inst.	X Grating/ Tilt	N-S Slit	~~Emulsion~~	P.H.	Program	Remarks	Quality
				ECHELLE 17.92	300 R/mm .579	60μ W 400μ H	6300Å	1			
								3			
45	4"-5"	3.50	MSIb					#5	KK Vis Bin	cloud a bit here.	20K
								3			
5	4'-5"	5.40	GSIII					6	KK Vis Bin	hard to see in glare of A some cloud on and off. and cut short due to fast moving cloud cover.	500 ADU
								3			
12	?	3.50	MSIb					5		mostly cloud.	
								3			
								3			
0	?	4.13	FTV					2	Std Vol.	mostly cloud - not much signal.	10 ADU above bkg
								3			
								1			
						60μ width 600μ Height=.205		3	Note For exact λ centering needs. Line 6303.250 is at col 136, Row 524 Center of Chip		10.7K
Restarted. (Not much Rain and dig again)								1			
						400μ H=.225		3			

pg#3 (251) Wed-Thurs

Date 1995 August 23/24 Observers [KK]/Tn/Smt

Emulsion Batches:

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Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Comparison Exp.
CE09643	HD187691	19 46 14	10 09 55	01 28 54		3 37 W			514
44	Comp							ThAr	4
45	HD187691	"	"	1 40 56		3 54 W			779
46	COMP							ThAr	4
47	COMP							"	4
48	HD8890A	01 22 34	+88 46 26	2 03 33		2 43 E			160
49	Comp							ThAr	4
50	HD8890A			2 08 34		2 38 E			160
51	COMP							ThAr	4
52	HD8890A			2 13 04		2 33 E			161
53	COMP							"	4
54	BIAS (4)			2 18					-
55	HD8890B	01 22 34	+88 46 26	2 27 18		2 01 E			1498
56	Comp							ThAr	45
57	HD8890A			2 50 42		1 55 E			184
58	COMP							ThAr	4

Spectr. Temp. ..... Dome Temp./Hum. 121.4°F 7406/H Transparency Conditions ... clearing quickly.....

Focus .....250.....

Spectr. Temp. ..... Dome Temp./Hum. .....

252

0 0 256 1024 4 1 ccdtest

Exp. Mtr.	Seeing	Tel. Mag.	Sp.	Inst.	X Grating/ Tilt	N-S Slit	Emulsion	P.H.	Program	Remarks	Quality
34	5"	5.12	F8V	CCD ECHELLE 17.92	300 ℓ/mm .579	60μ W 400μ H	6300Å (actually ~6303Å)	4	stdvel		1.3K
								3			
41	5"	5.11	F8V					4	Std Vel.		2.0K
								3			
								3			
283	3"	2	F8Ib					5	KK		10.7K
								3			
245		2	F8Ib					5	KK		7.8K
								3			
320	4"	"	"					5	KK		11.1K
								3			
								1			
0	4"	39	A?					5		Looks good on slit	200 above bkg.
								3			
255		2	F8Ib					5			
								3			

PG#4 253

Date 1995 August 23/24 Observers [KK]/Tn/Smt

Emulsion Batches:
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.....
.....

Spectr. Temp
Focus
Spectr. Temp

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Comparison Exp.	Exp. Mtr
ce09659	COMP							ThAr	4	
60	ADS2390A (B?)	3 05 48	+36 50	3 03 57		1 50 E			1640	0
61	COMP							ThAr	4	
62	ADS2390B (A?)			3 3552					1650	0
63	Comp							ThAr	4s	
64	ADS2390A (B?)			4 0820		0 47 E			1526	0
65	Comp							ThAr	4s	
66	BIAS(4)			4 37					—	
67	Comp							ThAr	4s	
68	HD22484	3 31 46	+0 05 04	4 4139		0 53E			630	35
69	Comp							ThAr	4s	
70	BIAS(4)			5 04					—	
71/72	in board / out board			≈5 10		3 00W	+20°	ThAr	4/9	

CCD Spectr. Temp. −101.7°C.... Dome Temp./Hum. 19.1°C/69.5% Transparency Conditions clear, windy.....

Focus .....250..... FANS OFF 254

CCD Spectr. Temp. ....−100.5°C.... Dome Temp./Hum. ..... 0 0 256 1024 4 1 ccdfmt.

Exp. Mtr.	Seeing	V ~~Pg.~~ Mag.	Sp.	Inst. CCD	X Grating/ Tilt	(N-S) Slit	~~Emulsion~~	~~P.H.~~	Program	Remarks	max ~~400~~ Quality
4				ECHELLE 17.92	300 ℓ/mm .579	60μW 400μH	6300 Å	3 ci			
1646	0	4"	8.1	combined G0			(actually ~6303 Å)	6 ci		3" separation barely noticeable West one.	500
4								3			~~400~~
1650	0	4"	8.3	combined G0				6 ci		East one. Could be A— we can't tell visually.	400
4								3			
1826	0		8.1	G0				6.		WEST one, sky starting to get bright by the end.	400
45								3			
-								1			
45								3			
638	35	4"	4.28	F9 IV-V				4	std vel	cloudy a little late, had to move prism manually.	1K
45								3			
-								1			
4/3		+1.79°C								0 0 128 1024 ccdfmt	
				All to Exabyte & Dis							

pg #1 (255) Thurs/Fri

Date 1995 August 24/25 Observers [kk] Tn/Smt

Emulsion Batches:

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Comparison Exp.	Exp Mtr
c09673/74	Inboard/outboard Hartmann							ThAr	4/3	
75	BIAS(4)			21 49					—	
76	Comp							ThAr	4s	
77	HD137909	15 23 42	+29 27 01	21 57 45		4 39 W			870	61
78	Comp							ThAr	4s	
79	HD137909	"	"	22 15 20		4 49 W			400	31
80	COMP							ThAr	4s	
81	HD137909	"	"	22 24 40		5 06 W			900	6
82	Comp							ThAr	4s	
83	BIAS(4)			22 46					—	
84	COMP							ThAr	4	
85	HD8890A	01 22 34	+18 46 26	22 49 23		5 53 E			320	145
86	Comp							ThAr	4	
87	HD8890A	"	"	22 56 44		5 46 E			320	210
88	Comp							ThAr		

CCD Speetr. Temp. -100°C ..... Dome Temp./Hum. +16.5°C 65.5% Transparency Conditions. P.cldy. cloudy .....

Focus ..... .249 ..... 90cgain FANS ON (256)

Spectr. Temp. ..... Dome Temp./Hum. +15.7°C 66.2%

Exp. Mtr.	Seeing	Pg. Mag.	Sp.	Inst. CCD	X Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	max ADU Quality
4/3				ECHELLE 17.92	3coll— .579	60μW 400μH	6300Å	1/2	FOCUS TEST	0 0 128 1024 8 1	-.29
										set just a bit cool. Strengths not same as last night or others.	
–								1		0 0 256 1024 4 1	
4s								3		Had to wiggle wires to FOCUS motor.	
870	61	3"-4"	3.66	F_8				4	kk pgm	Thick cloud here @ start. B CBr	2K
4s								3			
400	31	"	"	"				4	kk	weaker	800
4s								3			
900	6	5"	"	"				4	kk		
4s								3			
–								1			
4								3			
300	145	3"	2	F8Tb				5	kk pgm		5.5K
A								3			
320	210		2	"				5			
								3			

Pg #2 (257) Thurs/Fri

Date 1995 Aug. 24/25... Observers [AK]..Jn/Smat.....

Emulsion Batches:

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Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Comparison Exp.	Exp. Mtr.
CE09689	HD8890A	01 22 34	+88 46 26	23 03 37		5 39 E			324	323
90	Comp							ThAr	45	
91	COMP							"	4	
92	(ADS15600A) HD209791 *	22 00 54	+64 08	23 19 49		0 38 E			720	77
93	COMP							"	4	
94	HD209790 (ADS15600B) *	22 00 54	+64 08	23 38 06		0 02 E			1791	1
95	COMP							"	4	
96	(ADS15600A) HD 209791 *	"	"	0 10 50		0 14 W			727	of
97	Comp							"	4	
98	(ADS15600B) HD209790 *	"	"	0 25 54		0 45 W			1734	8
99	COMP							ThAr	4	
CE09700	(ADS15600A) HD209791 *	"	"	0 57 48		0 58 W			593	86
01	Comp							ThAr	4	
02	BIAS(4)			1 09						
03	Comp							ThAr	4	

CCD
Spectr. Temp. ...-100.6°C... Dome Temp./Hum. 15.6°C/66.1% Transparency Conditions . medium cloud, patchy but nearly overcast

Focus ...249.....

Spectr. Temp. ..... Dome Temp./Hum. ..... (Tombo)

FANS on 258

0 0 256 1014 4 1 ccdfmt

Exp. Mtr.	Seeing	Pg. Mag.	Sp.	Inst./Filt. Echelle	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
263	3"	2	F8IIb	17.92	300 l/mm	60μ W 400μ H	6300Å	5	kk pgm		
								3			
								3			
77	4"	4.80	A3m					4	kk Vis Bin	Done on Aug 21/22 with E-W slit. Some cloud here, too.	1.8 k
								3		exp. mtr counts REALLY low, but signal is same strength, appears.	
4	3"	5.30*	dF7					4	kk Vis Bin	* BSC lists it at V=6.47 and this looks about right 900sec faster and W, sky improving	
								3			
10f	4"	4.80	A3m					4	kk Vis Bin		
								3			
8	4"	5.30*	dF7					4	kk Vis Bin	* looks like BSC-listed V=6.5	
								3			
86	4"	4.80	A3m					4	kk Vis Bin		
	* Note Sep 15/95. Found HD CATALOG*							3			
	(Old Hean copy gives Brighter as HD209790)							1			
								3		Had to "jiggle" prism motor wires	

pg# 259 Thurs/Fri

Date 1995 Aug 24/25 Observers [K.H.] T.S./Smt

Emulsion Batches:

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Comparison Exp
ce 09704	HD 187691	19 46 14	+10 09 55	01 17 35		3 39 W			1045
05	Comp		*	01 39 33				ThAr	45
06	HD 187691	19 46 14	+10 09 55	01 40 49		4 09 W			1431
07	Comp							ThAr	45
08	BIAS(4)			02 07					
09	Comp							ThAr	45
10	HD 222368	23 34 48	+05 05 03	02 13 36		0 37 W			498
11	Comp							ThAr	45
12	HD 222368	"	"	02 25 10		0 49 W			501
13	Comp							ThAr	45
14	BIAS(4)			02 44					
15	COMP							"	4
16	ADS 2122 A	2 41 48	+18 57	2 50 29		1 33 E			1650
17	COMP							"	4
18	ADS 2122 B	"	"	3 24 41		0 58 E			1763

CCD
Spectr. Temp. -101.7°C Dome Temp./Hum. +13°C 67%H Transparency Conditions Fine now

Focus ...249...

Spectr. Temp. ... Dome Temp./Hum. ... cloudy

260 MAX

Exp. Mtr.	Seeing	Pic. Mag.	Sp.	Inst. echelle	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
38	5"	5.12	F8V	17.92	300 l/mm .579	60u W 100u H	6300Å	5	std vel	GPIB ERROR	
500	(no	prism	problem	for this one)				1	*	Reported after Resetting Hardware	
38		5.12	F8V					2	std vel		1.7K
500	no prism problem either							3			
								1			
480								3			
80	3"	4.13	F7V					4	std vel		2K
470								3			
74		4.13	F7V					4	std vel		1.8K
~400								3			
								1			
~300								3		manually moved prism	
0	4-5"	7.40	dF9					5	kk V vs B2	brighter RSE - seeing not too good anymore - very close and barely separable, hard to focus	500
								3		Use manually tweaked and NW	
0	4"	8.20	?					5	kk V vs B2		400

Pg # 4 — Thurs/Fri (261)

Date 1995 Aug. 24/25 Observers [KH] In/Out

Emulsion Batches: .....

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Comparison Exp.
Ce09719	Comp							ThA	4s
20	ADS 2122 A	02 41 48	+1857	03 57 26		0 26 E			1691
21	Comp	[Prism moved by hand]		04 41 10				ThA	4s
22	BIAS(4)			04 42					
23/29	Flats x 7					02 30W	+19°	TUNG	2
30/31	in beam / out beam			05		"	"	ThA	4/9
32	Hartmann - IN			10:15				3	
33	- OUT							3	

Spectr. Temp. ..... Dome Temp./Hum. +11.7°C 69.2% Transparency Conditions . Fine .....

Focus .249 .....

~~Spectr.~~ CCD Temp. ..... Dome Temp./Hum. +11.3°C 69.5%

262

0 0 25C 1024 4 1 ccdtst

Exp. Mtr.	Seeing	Pur. Mag.	Sp.	Inst. echelle	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
500	4			1792	300 l/m x .579	60u W 400u H	6300Å	3			
0	4-3*	740	dF9					6	kt VisBin	sky getting bright.	500
								3	Prism motor Had to be Removed to Move	Prism to 'C' posn	
								1			
								2			
								7/8		a 0 1281024 8 1	.21
	All to D:\ and Exabyte.										
										T=15.4	-0.14
										F=.249	

Friday (263)

Date 1995 Aug. 25 Observers KK

Emulsion Batches:

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Comparison Exp.
CE09734	Comparison								
35	Sky	2^h30^m W	+35°			2^h30			60
36	Sky			10:53					120
37	"								
38	"								
39	"								240
40	Comparison								4
41	Bias (4)								
42	Comparison								4
43	Sky								60
44	"								120
45	"								120
46	"								120
47	Comparison								
48	Bias (4)								

Spectr. Temp. ..... Dome Temp./Hum. ..... Transparency Conditions .....

Focus .....

Spectr. Temp. ..... Dome Temp./Hum. .....

264

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
										CCD set −120° by mistake	
60										peak 2600	
120											
240										peak 12000	
4										brighter saturated	
4										CCD temperature to −100°	
60										peak 3160	
120											
120											
120											
							To Perseus				

Fri/Sat 265

Date 1995 Aug 25/26 ... Observers Vnk/Tn + Z. Balog (student)

Emulsion Batches: .....

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Comparison Exp.
CC 3480 3/04	InBoard / OutBoard					0 0	+19°	FeAr	60/60
05	BIAS(4)								
06	Comp							FeAr	60s
07	HD 347827	17 56 49	+19 16 00	20 24 37					1613
08	Comp							FeAr	60s
09/17	FLATS x 9					0 0	-20°	TUNG Hp=4/4	8se
18	BIAS(4)								
	~~Comp~~							~~FeAr Clear~~	~~60s~~
	~~HD 187641~~	19 46 14	+00 09 55	00					

CCD
Spectr. Temp. -100.5°C Dome Temp./Hum. 416.9°C 57% Transparency Conditions ... Partly Cloudy
Increasing Cloud
Focus 6.70 266
Spectr. Temp. ..... Dome Temp./Hum. 416.9°C 67% A

Exp. Mtr.	Seeing	PL. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
no filter				CASS CCD	1800 b/mm G=6100	306u	6600Å	3/4	ci		
								1/2			
								5			
500	2-3"	≈10						6	Type II Cepheids	≈ 55/1 S/N Too cloudy	
								7			
								8			14A
								1			
	All to D: and Perseus.							9		Too Cloudy	3.6A
								10	Stellar	Some cloud	

Pg#2 sun/mon 267

Date 1995 Aug 27/28 Observers V.K. / J.T. + Z. Balog

Emulsion Batches:

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Comparison Exp.
CC 34819/20	Inboard / Outboard					0	+46°	Feather clear	60/60
CC 34821	BIAS(4)								
22	Comp							Feather clear	60s
23	HD 187691	19 46 14	+10 09 55	19 55 11		01 47 E			145
24	Comp							Feather clear	60s
25	Comp							"	"
26	HD 347827	17 36 49	+19 15	20 11 42		00 56 W			2357
27	Comp							Feather clear	60s
28	BIAS(4)								
29	Comp							Feather clear	60s
30	HD 229414	18 41 00	+12 14 00	est. ~~End~~ 21 10 39		01 01 W			1821
31	Comp			~~21 00 42~~	21 49 26			Feather clear	60s
32	Comp			22 00 42				"	"
33	HD 229680	18 45 58	+15 49 00	22 03 23		2 03 W			2627
34	Comp							Feather clear	60s
35	BIAS(4)								

CCD Spectr. Temp. 100.5°C ..... Dome Temp./Hum. 118.9°C 70%H Transparency Conditions .. Fine -> increasing Haze ...

Focus .... 6.70 ..... 90C gain (268 max HCY)

Spectr. Temp. ..... Dome Temp./Hum. 116.3°C 80% (* Slit Rotated very slightly CCW from Auto to Limit)

Exp. Mtr.	Seeing	Pg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit *	Emulsion	P.H.	Program	Remarks	Quality
No filter				CASSCCD	1800 l/mm G=6100	306u		3/4	focus	410, 0, 50, 1024, 1, 1 CCOffset	
								1/2			
								5			3.5K
4500		5.12	F8V					6	Stdbel		5.5K
								7			
								8			3.5K
560	<3"	210	1F					~~9~~	Cepheid V in K (BLHer) = 75/1 S/N		
								10		After Sp control failure	
								1/2			
								11			
617	3"	210						12	Cepheid. Resolution 9ci: = BB Her = 100/1 S/N		630
								13?	(not sure now if comp worked)		
								1	non GPIB glitch "? (no, my fault + fixed)		
515	<3"	10.19 - 11.18						2	Cepheid V in K AP Her 78/1 S/N		
								3			
								/			

P902 Sun/Moon 269

Date 1995 Aug. 27/28 Observers Vnk/Tn + Z Balog

Emulsion Batches:

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Comparison Exp.
cc34836	Comp							Feat Clear	60c
37	HD 356404	19 52 48	+10 46	22 56 37					1460
38	Comp							Feat Clear	60s
39	Comp							"	"
40	HD 354511	19 56 35	+15 31 00	23 32 59		2 16 W			2274
41	Comp							Feat Clear	60s
42	BIAS (4)								
43	Comp							Feat Clear	60s
44	V 383 Cyg	20 25 03	13 34 48	00 25 45		2 43 W			2377
45	Comp							Feat Clear	60s
46	Comp							"	"
47	BD+17 4572	21 19 21	+17 51	01 13 55		2 17 W			1201
48	Comp							Feat Clear	60
49	BIAS (4)								
50	Comp							Feat Clear	60s

CCD
Spectr. Temp. −101.5°C... Dome Temp./Hum. +16°C... 81% Transparency Conditions ..Slight haze, some cloud...

Focus ...6.70.....

CCD
Spectr. Temp. ..−100.3°C.... Dome Temp./Hum. ..+15.3°C..... 270 HDG MAX

Exp. Mtr.	Seeing	Fig. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
				CASS CCD	1800 l/mm G=6100	306u	6600Å	4			3.7K
550	3"	9.76 −10.16						5	Cepheid	V733 Agl	
								6			
								7			
560	3"	9.8 −10.6						8	Cepheid	KL Agl	
								9			
								1			
								10			
400	2"-3"	10.6 −11.2						11	Cepheid		
								12			
								13			3.7K
860	3"	8.9 −9.5						14			
								15			
								1			
								16			

pg 43 Scan/mon 271

Date .1995. Aug. 27/28... Observers ..V.n.K./.T.n.....

Emulsion Batches:
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Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Comparison Exp.
cc34851	HD6457	01 0020	+205548	01 4432		E			236
52	Comp							FeAr Clear	60s
53	"							"	"
54	HD222368	23 3448	+5 0503	01 5901		00 28W			123
55	Comp							FeAr Clear	60s
56/64	FLATS x 9					00 33W	+5 34	Tung Appl'q	8s
67	BIAS(4)								
65/66	inboard/out board					0 0	+20°	FeAr Clear	60/60

Spectr. Temp. ..... Dome Temp./Hum. +15.2°C 86% Transparency Conditions ..Slightly hazy.....

Focus ...6.70.....

Spectr. Temp. ..... Dome Temp./Hum. 15.2°C 87% (272) MAX

Exp. Mtr.	Seeing	Pwr. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
5000	3"	5:56	AOV$_n$	CASS CCD	1800/l, G=6100	306	GG495	17	Telluric Std	AIR MASS 1.12	5K
								18			
								19.			
8500		4:13	F7V					20	std vel		10K
								21			
								22.			14K
	15.2°C	Set 6.70						23/24	focus test		
		All	to	D:\To-CRON\	CASS & Persons.						

pg#1 Mon/Tues (273)

Date 1995 Aug 28/29 Observers VK/To

Emulsion Batches:

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Comparison Exp
CC 348 68/69	Inboard/Out Board					00 17W	37°	Feather clear	60/60
70	BIAS(4)								
71	Comp							Feather clear	60
72	HD 187691	19 46 15	+10 09 55	19 43 28		E			180
73	Comp							Feather clear	60
74	HD 187691	"	"	19 50 17		1 48 E			180
75	Comp							Feather clear	60
76	Comp							"	"
77	HD 347827	17 56 49	19 15 00	20 03 34		0 40 W			1688
78	Comp							Feather clear	60
79	Comp							"	"
80	HD 229414	18 41 18	+12 14 00	20 40 05		0 31 W			1616
81	Comp							Feather clear	60
82	BIAS(4)			21 09					
CG 800 68/71	HD 187120	19 43 12	+45 29	= 21 20		00 18E		4x	67ms
CG 800 72/73	"	"	"					2x	133ms

CCD Speetr. Temp. −100.2 °C Dome Temp./Hum. +20.6°C 60%H Transparency Conditions. Fine ... part. cloudy .....

Focus ... 6.70 .....

CCD Spectr. Temp. --- Dome Temp./Hum. +19.2°C 66%H 274

C Lambda 410 050 1024 4 1 CCDFMT MAX

Exp. Mtr.	Seeing	Pix Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
not taken				CASS CCD	1800 l/mm G=6100	306u *	6600Å	3/4	focus test		
					* Slit Rotation Prompt Adj CW 1/4 turn looks good			1/2			
								5			3.7
6500	3"	512	F8V					6	Std vel	column 22 strongest	
								7			
6600		"	"					6	Std vel	column 24 strongest	
								8			
								9			
610	2"-3"	710						10	Cepheid V&K	BL Her	
								11			
								12			
580	3"	9.7 - 10.4						13	Cepheid V&K		
								14			
	2"-3"	7.52	K0 III					1/2			
					Above 306u Slit				Seeing test	Some Wost only NE Fan on	

Pg #2 Mon/Tues 275

Date ..1.995. Aug 28/29.... Observers .VaK./.Tn.....

Emulsion Batches: .....
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Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Comparison Exp
cc34883	Comp							Feär Clear	60s
84	HD177724	19 00 49	+13 42 53	21 34 07		0 39 W			75
85	Comp							Feär Clear	60
86	Comp							"	"
87	HD356404	19 52 48	+10 46	21 55 16		0 30 W			1295
88	Comp							"	"
89	BIAS (4)			= 2220					
90	Comp							Feär Clear	60
91	V572 Aql	19 57 27	00 25 00	22 30 47		1 15 W			2180
92	Comp							Feär Clear	60
93	Comp							"	"
94	HD222368	23 34 46	+05 05 03	23 26 36		1 57 W			372
95	Comp							"	"
96	Comp							"	"
97	V383 Cyg	20 25 03	+33 48	23 44 56		1 55 W			704
98	Comp							Feär	60

Spectr. Temp. ..... Dome Temp./Hum. +19.5°C 66% Transparency Conditions .. Part. Cloudy .....

Focus ..... 6.70 .....

Spectr. Temp. CCD -102.0°C .... Dome Temp./Hum. ..... Cumbre

276 max ADU

Exp. Mtr.	Seeing	Pic. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
				CASSCCD	1800 l/mm G=6100	306u	6600B	15		After Sy contr failure	
12K		2.99	A0 $\bar{V}_n$					16	Telluric Std		9K
								17			
								18		After another Sy Contr failure	37K
610	2"-3"	9.7 -10.2						19	Cepheid V+K		
								20			
								1/2			
								21			
450	2"-3"	11.0 -11.4						22	Cepheid V+K	increasing cloud	
								23		After another Sy contr Failure	
								24			
5500	4"	4.3	F7 V					25	Std Vel		7K
								~~26~~			
								26			
525	<3"	10.6 -11.2						27	Cepheid V+K		
								28			

Pg #3 Mon/Tues 277

Date 1995 Aug. 28/29 Observers V.A.K. J.T.

Emulsion Batches:

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Comparison Exp.
cc34899	BIAS(4)								
900 To 908	FLATS x 9*	[Note cc34901 and cc34907 are small Files and were probably corrupted by a CCD3/ windows problem]				2 30E	+54°	Tung Ap 1/4	8s
	~~Comp~~ -								
cc34909/10	Inboard/Outboard			01 52		0 0	+32°	Feltz Clear	60/60
11	Comp			03				4	60s
12	Nova Cas 95	01 05 37	+54 00 40	03 49		0 22W			383
13	Comp			03	Corrected after Acq crash			Feltz Clear	60s
14	Nova Cas 95	"	"	03 20 23		0 39W			795
15	Comp			03 20 23				Feltz Clear	60s
16	BIAS(4)								

CCD
Spectr. Temp. −102.1 c Dome Temp./Hum. +17.9°C 73.5%H Transparency Conditions Part. Cloudy (270)

Focus 6.70

Spectr. Temp. ..... Dome Temp./Hum. 18.0°C 74%
c Lambda

Then quickly very cloudy
MAX

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
				CASS CCD	1800 l/mm G=6100	306u	6600Å	1/2	N Cas 9 Softest	+ 00 00 +10 + 00 03 00	
								1			1.4K
T = +18.0°C			Set 6.70					29/30	focus	Righton	
				All to Perseus c	D:\Jon\CCDRom\			3	Cass		
123	3"	V 9.3						4	for VRK studies	Δ RA −00 00 27 Δ Dec +00 03 12 (Mostly cloudy)	1.5K
								5			
300								6	Actuate Tel	posn 01 04 55 & 54 02 15	5K
								7			
				Note Feb 20/96 Tn				*	CC 34902 is an 8 sec dark due to Flat misfire and PC crash probably.		

Pg #1 [Tues/Wed] (279)

Emulsion Batches: .....

Date 1995 August 29/30 Observers Vnk/Sat + Rm + Ilana Dashevsky until 21:45 .....

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Comparison Exp.
cc34917/18	INBOARD/OUTBOARD	HARTMANN						Fe+ clear	60/60
19	BIAS(4)								—
20	COMP							"	60
21	HD187691	19 46 14	+10 09 55	20 29 53	1 04 E→				181
22	COMP							"	60
23	COMP							"	"
24	HD347827	17 56 30	+19 15	20 45 49	1 22 W→				1385
25	COMP							"	60
26	BIAS(4)								—
27	COMP							"	60
28	HD177724	19 00 49	+13 42 53	21 26 26		~0 40m W			71
29	COMP							"	60
30	COMP							"	"
31	HD229414	18 41 18	12 14	21 42 07		1 40 W			1800
32	COMP							"	"

CCD
~~Spectr.~~ Temp. -100°C Dome Temp./Hum. 19.5°C / 62.7% Transparency Conditions . clear 280

Focus 6.20 FANS OFF

Spectr. Temp. Dome Temp./Hum. cc 410 0 50 1024 4 1 ccdfast

Exp. Mtr.	Seeing	~~V~~ Mag.	Sp.	Inst.	Grating/ Tilt	Slit	~~Emulsion~~	~~P.H.~~	Program	Remarks	Quality
no filter				CASS CCD	1800 l/mm G=6100	306μm	6600Å	3/4			
								1			
								5			
5200		5.11	F8V					6	Std Vel	~~B~~	
								7			
								8			
576	4"-5"	9.70 -10.62						9	Unk Cepheid	S/N ~ 70:1 BL Her	
								10			
								1			
								11			
14.7K		V 2.99	A0Bn					12	Telluric Std		
								13			
								14			
505	4"	9.76 -16.46						15	Unk Cepheid	BB Her	
								16			

pg #2 (281)

Date 1995 August 29/30 Observers Vnk/Smt ... that's all now.

Emulsion Batches:
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Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Comparison Exp.
cc34933	BIAS(4)			22 16					—
34	COMP							Fe4+ clear	60
35	HD229680	18 45 54	+15 49	22 25 27		?			2003
36	COMP							"	60
37	BIAS(4)			23 11					—
38	COMP							"	60
39	HD356404	19 52 48	+10 46	23 15 15		1 56 W			1433
40	COMP							"	60
41	COMP							"	"
42	HD354511	19 56 35	+15 31	23 50 11		2 24 W			1234
43	COMP							"	"
44	BIAS(4)			0 14					—
45	COMP							"	60
46	V383 Cyg	20 25 03	+33 48	0 29 28					1864
47	COMP							"	60

CCD
~~Spectr~~. Temp. -100.5°C Dome Temp./Hum. 11.8°C / 74.1% Transparency Conditions clear, no Moon

Focus 6.70

Spectr. Temp. Dome Temp./Hum. climbing

282

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	~~Emulsion~~	P.H.	Program	Remarks	Quality
no filter				CASS CCD	1800 l/m G=6100	50μm	6600Å	1			
								17			
~300	4"	10.19 - 11.18						18	Unk Cepheid	AP Her	
								19			
								1			
								20			
525		9.23 - 10.16						21	Unk Cepheid	V733 Aql	
								22			
								23			
520		9.82 - 10.56						24	Unk Cepheid	KL Aql	
								25			
								1			
								26			
500		10.60 - 11.17						27	Unk Cepheid.		
								28			

pg #3

283

Date 1995 August 29/30 Observers Vnk / Smt

Emulsion Batches:

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Comparison Exp.
cc 34948	BIAS (4)			1 20					—
49	COMP							Fe Ar clear	60
50	BD+17 4572	21 19 21	+17 51	1 30 21		2 37 W		"	950
51	COMP							"	60
52	BD+17 4572			1 51 43		2 59 W			1000
53	COMP							"	60
54	BIAS (4)			2 14					—
CG80014-77	HD3765 x4	0 35 18	+39 40						.067
78/79	" x2			~~2 25~~	2 25 50	0 0 E	86° Alt		.133
55	COMP							Fe Ar clear	60
56	HD3765	0 35 18	+39 40	2 30 16		0 16 W			703
~~57~~	COMP							"	60
58	COMP	"	"					"	"
59	DQ And.	0 53 54	+44 52	2 57 07		0 42 W			1800
60	COMP							"	"

Spectr. Temp. -100°C Dome Temp./Hum. 15.3°C/71.6% Transparency Conditions ..clear.....

Focus .....6.70..... Dome Temp./Hum. 14.8°C/71.6% @SEEING TEST FANS OFF 284

Spectr. Temp. .....

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	~~Emulsion~~	P.H.	Program	Remarks	Quality
–				CASS CCD	1800 Rlm G=6100	30μm	6600 Å	1			
60								29			
950	680		8.98 -9.47					30	Vnk Cepheid.	AU Peg most likely emission!	S/N ~90:1
60								31			
1000	775		"					32	"	2nd exp. AU Peg.	
60								33			
–								1			
.067		5"	7.36	dk5	EEV CCD TV GUIDER	above 30μm		–	SEEING TEST	Dome SW, light NW wind, it was windier earlier, 8°C at	
.133		"	"	"				–	"	5°C drop since start of night	
60				CASS CCD				5			
703	2800	4"-5"	7.36	dk5				6	Std Vel.		
40								7			
"								8			
1800	160		11.23 -12.00					9	Vnk Cepheid	very faint. perhaps some emission but lost in the noise	
"								10			

pg #4 285

Date 1995 August 29/30 Observers Vnk / Smt

Emulsion Batches:

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Comparison Exp.
cc34961	BIAS(4)			3 31					—
62	COMP							Fea clear	60
63	BD Cas	0 04 39	+60 57	3 47 21		2 26 W			2000
64	COMP							"	60
65	BIAS(4)			4 24					—
66	COMP							"	60
67	Nova Cas 95	1 05 37 (2000.0)	+54 00 40	4 31 49		1 45 W			160
68	COMP							"	60
69	Nova Cas 95			4 39 11		1 59 W			600
70	COMP							"	60
71	COMP							"	"
72	HD22484	3 31 46	+0 05 04	4 56 49		0 22 E			180
73	COMP							"	60
74-79	FLAT x 6					0h	0°	Tung Y4 Ap 1	8
80	BIAS(4)			5 13					—
81/82	INBOARD/OUTBOARD HARTMANN							Fea clear	60/70

Spectr. Temp. ..... Dome Temp./Hum. 14.1°C / 70.8% Transparency Conditions .. clear .....

Focus ..... 6.70 .....

Spectr. Temp. ..... Dome Temp./Hum. 13.0°C / 71.6% @ ending focus test 286

Exp. Mtr.	Seeing	~~Rtg~~ Mag.	Sp.	Inst.	Grating/ Tilt	Slit	~~Emulsion~~	P.H.	Program	Remarks	Quality
–				CASS CCD	1800 l/mm G=6100	306μ	6600 Å	1			
60								11			
2000	414	4"	10.84-11.21					12	Unk Cepheid.	weak	
60								13			
–								1			
60								14	Unk / Nova		
160	134	3"	~9.3	e				15	↓	HUGE Hα emission.	2K
60								16			
600	540	3"	~9.3	e				17	Unk/Nova		6.8K
60								19			
"								20			
180	9.8K	5"	4.28	F9 IF V				21	Std. Vel.		10K
6								22			
8								23			14.6K → 14.0K
–								1			
								3/4	FOCUS TEST	in focus.	

pg #1 287

Date 1995 August 30/31 Observers Vnk./Smt.....

Emulsion Batches:
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Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Comparison Exp.
cc34983/84	INBOARD/OUTBOARD							Feder clear	60/65
85	BIAS(4)			19 47					—
86	COMP							"	60
87	HD136202	15 14 12	+2 08 37	19 52 12		2 57 W			400
88	COMP							"	60
89	COMP							"	"
90	HD159139	17 27 54	+28 28 47	20 12 34		1 03 W			300
91	COMP							"	60
92	BIAS(4)			20 21					—
93	COMP							"	60
94	HD347827	17 56 49	+19 15	20 28 47		1 05 W			1200
95	COMP							"	60
96	HD347827			20 55 03		1 32 W			1200
97	COMP							"	60
98	BIAS(4)			21 23					—

Spectr. Temp. -100.5°C Dome Temp./Hum. 18.8°C/67.7% @ FOCUS TEST Transparency Conditions a couple of clouds

Focus 6.72 FANS ON 288

Spectr. Temp. ..... Dome Temp./Hum. ..... ch ch: 416 0 50 1024 4 1 ccdfast

Exp. Mtr.	Seeing	~~Pwg.~~ Mag.	Sp.	Inst.	Grating/ Tilt	Slit	~~Emulsion~~	P.H.	Program	Remarks	Quality
no filter				CASS CCD	1800 l/mm G=6100	30μm	6600Å	3/4	FOCUS TEST	set a bit cool, in focus @ ~800 pix.	
								1		hot pixel ecol 27	
								5			
7700	3"	5.06	F8 IV-V					6	Std. Vel.	centered on col 22-23	10.4K
								7			
								8			
6370	3"	5.62	A1V					9	Telluric Std.	western part of list, not far high airmass but lots of lines	5K
								10			
								1			
								11			
608	3"	9.70 -10.62						12	Unk Cepheid	emission BL Her	
								13			
595	2-3"	9.70 -10.62						14	Unk Cepheid	BL Her	
								15			
								1			

pg # 2 289

Date 1995 August 30/31 Observers Vnk/Smt

Emulsion Batches:

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Comparison Exp
cc34999	COMP							Fe Ar clear	60
cc35000	HD229414	18 41 18	+12 14	21 26 34		1 22 W			1411
01	COMP							"	60
02-07	FLAT x 6					4 35 E	+54°	Tung ¼ Hp	8
08	COMP							Fe Ar clear	60
09	Nova Cas 95	1 05 37 2000.0	+54 00 40	22 1430		4 15 E			1026
10	COMP							"	60
11	BIAS(4)			22 35					—
12	COMP							"	60
13	HD229680	18 45 54	+15 49	22 45 59		?			2053
14	COMP							"	60
15	BIAS(4)			0 05					
16	COMP							"	"
17	HD356404	19 52 48	+10 46	0 06 13		2 44 W			965
18	COMP							"	60
19	COMP							"	"

Spectr. Temp. ..... Dome Temp./Hum. 18.1°C / 73.2% Transparency Conditions ..hazy., partly cloudy....

Focus ..... 6.72 ..... N FAN ON ONLY (290)

Spectr. Temp. ..... Dome Temp./Hum. ..... 416 0 50 1024 4 1 ccdfmt

Exp. Mtr.	Seeing	~~V Mag.~~	Sp.	Inst.	Grating/ Tilt	Slit	~~Emulsion~~	~~P.H.~~	Program	Remarks	~~Quality~~
				CASS CCD	1800 l/mm G=6100	306μ	6600 Å	16			
506	2"-3"	9.76 -10.46						17	Unk Cepheid	BB Her	6pc above Vq.
								18		cloudy now but will clear	
								19			NOK →13.5K
								20			
600	3"	~9	e					21	Unk / Nova	cloudy, just here now, figures. ara -20°, dec 22.20	11 3K
								22			
								1			
								23			
400	"2-3"	10.19 -11.18						24	Unk Cepheid	AP Her	
~~400~~								25			
								~~26~~			
230		9.73 -10.16						27	Unk Cepheid	V733 Aql, cut short by cloud.	100 pc above Vq
								28			
								29		very cloudy here.	

pg #3 (291)

Date 1995 August 30/31 Observers Vnk / Smt

Emulsion Batches:
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Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Comparison Exp
CC35020	HD187691	19 46 14	+10 09 55	0 32 02		3 09 W			600
21	COMP							Fe Ar clear	60
CG80080-83	HD218525 x 4	23 03 35	+44 01 14						.067
84/85	" x 2				1 04	0 14 W	87° Alt		.133
CC35022	BIAS (4)								—
23/24	INBOARD/OUTBOARD	HARTMANN				0 02 E	+19°	Fe Ar clear	60/65

Spectr. Temp. ..... Dome Temp./Hum. 16.9°C / 78.0% Transparency Conditions . mostly cloudy .....

Focus ..... 6.72 ..... @ seeing test

Spectr. Temp. ..... Dome Temp./Hum. 16.9°C / 78.8% @ FOCUS TEST

N FAN ON ONLY

4/16 0 50 1024 4 1 ccdtest

292

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	~~Emulsion~~	~~P.H.~~	Program	Remarks	Quality
4700	3"	5.11	F8II	CASS CCD	1800ℓ/m G=6100	30μ	6600Å	30	Std. Vel	thick cloud @ start.	6.5K
								31			
				EEV CCD		above		—	SEEING TEST	Done W, mostly cloudy overhead, cloudy everywhere else, no wind.	
				TV GUIDER		30μ		—			
				CCD CASS				1		completely overcast now.	
								3/4		dome closed.	
			Hdl to DAT & D:\								

pg # 1 [Thu/~~Fri~~] 293

Date 1995 August 31/ September 1 Observers Vnk/Smt

Emulsion Batches:
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Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Comparison Exp.
CCD5025/26	INBOARD/OUTBOARD	HARTMANN						Fe Ar clear	60/65
27	BIAS(4)			19 50					—
28	COMP							"	60
29	HD136202	15 14 12	+2 08 37	19 56 54		~3h W			231
30	COMP							"	60
31	COMP							"	"
32	HD130109	14 41 12	+2 18 51	20 08 56		3 46 W			120
33	COMP							"	60
34	COMP							"	60
35	HD145001	16 03 34	+17 18 48	20 26 58		2 43 W			160
36	COMP							"	160
37	COMP							"	60
38	HD347827	17 56 49	+19 15	20 39 23		1 26 W			1600
39	COMP							"	60
40	BIAS(4)			21 13					—

CCD
~~Spectr~~. Temp. -100.5°C Dome Temp./Hum. 20.2°C/59.1% Transparency Conditions clear, windy
@ FOCUS TEST
Focus 6.68 FANS OFF 294
Spectr. Temp. Dome Temp./Hum. cλ ci 416 0 50 1024 4 1 ccdfmt

Exp. Mtr.	Seeing	~~V/Dis~~ Mag.	Sp.	Inst.	Grating/ Tilt	Slit	~~Emulsion~~	P.H.	Program	Remarks	Quality
no filter				CASS CCD	1800 l/mm G=6100	30μm	6600 Å	3/4	FOCUS TEST	Set a bit cool.	
								1			
								5			
6300	5"	5.06	F8 ~~IV~~-V					6	Std. Vel		7.5K
								7			
								8			
7000	5"	3.72	A0V					9	Telluric Std.	just above platform	8.1K
								10			
								11			
5800	3-4"	5.00	G5III					12	Std. Vel	brighter of 2 close ones	8K
								13			
								14			
500	2-3"	9.70 -10.62						15	Unk Cepheid.	BL Her, emission?	Low S/N b/g
								16			
								1			

Pg #2 295

Date 1995 Aug. 31/Sep. 1 Observers Vnk./Smt

Emulsion Batches:

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Comparison Exp.
cc35041	COMP							FeAr clear	60
42	HD229414	18 41 18	+12 14	21 21 30		~1 30 W			1641
43	COMP							"	60
44	COMP							"	"
45	HD229680	18 45 54	+15 49	21 59 46		2 13 W			2497
46	COMP							"	60
47	BIAS(4)			22 46					—
48	COMP							"	60
49	HD356404	19 52 48	+10 46	22 54 15		1 35 W			980
50	COMP							"	60
51	COMP							"	"
52	V572 Aql	19 57 27	+0 25	23 20 39		2 20 W			2400
53	COMP							"	60
54	BIAS(4)			0 04					—
55	COMP							"	60

CCD

~~Spectr.~~ Temp. -101.7°C Dome Temp./Hum. 19.0°C / 59.9% Transparency Conditions .. clear, bit of wind

Focus ..... 6.68 FANS OFT (296)

Spectr. Temp. ..... Dome Temp./Hum. 17.7°C / 64.9% @ 1st BIAS(4) 416 0 5C 1024 4 1 ccdat

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	~~Emulsion~~	P.H.	Program	Remarks	more for Quality
no filter				CASS CCD	1800 l/mm G=6100	306μ	6600Å	17			
800	3"	9.76 - 10.46						18	Vnk Cepheid.	thin wispy clouds here. BB Her	1K
								19			
								20			
463	2"-3"	10.19 - 11.18						21	Vnk Cepheid.	a bit of thin cloud. AP Her	800 above b/g
								22			
								1			
								23			
476	2"-3"	9.73 - 10.16						24	Vnk Cepheid.	noisy. not much here V733 Aql	550 above b/g
								25			
								26			
361	2"-3"	11.00 - 11.44						27	Vnk Cepheid.	noisy & weak	300 above b/g
								28			
								1			
								29			

Pg #3 297

Date 1995 Aug. 31/Sep. 1 Observers Vnk/Smt

Emulsion Batches:

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Comparison Exp.
cc35056	HD354511	19 56 35	+15 31	0 12 13		2 56 W			1388
57	COMP							Feb clear	60
58	COMP							"	"
59	HD187691	19 46 14	+10 09 55	0 43 14		3 19 W			240
60	COMP							"	60
61	BIAS(4)			0 50					—
62	COMP							"	60
63	V383 Cyg	20 25 03	+33 48	0 58 21		3 29 W			2220
64	COMP							"	60
65	BIAS(4)			1 43					—
66	COMP							"	60
67	BD+17° 4572	21 19 21	+17 51	1 46 38		2 59 W			300
68	COMP							"	60
i680066-89	HD37165 x4	0 35 18	+39 40						.067
90/91	" x2					0 09 E	86° Alt		.133

Spectr. Temp. ..... Dome Temp./Hum 17.0°C/64.6% Transparency Conditions clear → thin clouds

Focus 6.6.8

Spectr. Temp. ..... Dome Temp./Hum. 15.8°C/68.7% @ SEEING TEST END 4/16 0 50 1024 4 1 ccdat

298

FANS OFF

Exp. Mtr.	Seeing	√ Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
500	3"	9.82 -10.56		CASS CCD	1800 l/m G=6100	306μ	6600°A	30	Vnk Cepheid	KL Aql	500 above bkg
								31			
								32			
5650	4"-3"	5.11	F8 V					33	Std Vel		6.8K
								34			
								1			
								5			
400	3"	10.60 -11.17						6	Vnk Cepheid	some thin clouds cosmic ray in spectrum	400 above bkg
								7			
								1			
								8			
516	3"	8.98- 9.47						9	Vnk Cepheid	some thin clouds. AU Peg Emission?	400 above bkg
								10			
	3"-4"	7.36	AK5	CCD CCD TV GUIDER		above 306μ		—	SEEING TEST	Dome W, med W wind, thin clouds, getting worse	
								—	"		

pg # 4 299

Date 1995 Aug 31 / Sep 1 Observers Vak / Smt

Emulsion Batches:
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Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Comparison Exp.
cc35069	COMP							FeAr clear	60
70	HD3765	0 35 18	+39 40	2 12 53		0 01 W			400
71	COMP							"	60
72-77	FLAT x 6					0 07 E	+45°	Tung ¼ Aop	8
78	BIAS(4)			2 30					—
79	COMP							FeAr clear	60
80	NOVA CAS 95	1 05 37 2000.0	+54 00 40	2 38 56		0 22 W			1550
81	COMP							"	60
82	COMP							"	"
83	IX CAS	23 59 42	+49 41	3 32 21		2 30 W			2416
84	COMP							"	60
85	BIAS(4)			4 25					—
86	COMP							"	60
87	BD CAS	0 04 39	+60 57	4 29 01					1700
88	COMP							"	60
89/90	INBOARD / OUTBOARD	HARTMANN						FeAr clear	60/5

CCD
Spectr. Temp. -100.7°C Dome Temp./Hum. 15.8°C/68.8% Transparency Conditions. thin cloud

Focus 6.68

Spectr. Temp. Dome Temp./Hum. 15.2°C/77.4% @ BOCAS FANS OFF 300

416 0 50 1024 4 (=dat

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
				CASS CCD	1800 l/mm G=6100	300μm	6600Å	11			
1040	4"	7.36	dk5					12	Std Vel.	some cloudy periods.	1.5K
								13			
								2		cloud increasing thickness → 13.6K	14.2K
								1			
								14			
548	3"	?	e!					15	Vnk / Nova	not as much cloud here. Until later Δra ~ -30s	6.0K
								16			
								17		lamp didn't shut off @ end.	
exp. w/ shutter closed		11.19 - 11.77						18	Vnk Cepheid.	sky clearer now. Δδ = -3'	12.0 above obj
								19			
								1			
								20			
444		10.84 - 11.21						21	Vnk Cepheid.	sky getting bright @ end.	3.0 above obj
								22			
				All to DAT & D:1				314	FOCUS TEST	NEW SET to MAIN. ALIGNED & PERFECT for the night.	2.9.0 raw

pg #1 Fri/Sat 301

Date 1.9.95. Sep 1/2.... Observers [Rm]..Jo./Scott.....

Emulsion Batches:
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Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Comparison Exp.
CC350 91/92	Inboard/OUTboard					00 19W	46°	Fe Ar clear	50/60
93	BIAS(4)			19 43					
94	Comp							Fe Ar clear	60
95	HD171391	18 29 29	-11 03 19	19 58 33		0 07 E			242
96	COMP							"	60
97	COMP							"	"
98	HD173297	18 39 20	-20 45	20 11 36		0 12 W			1200
99	COMP							"	60
CC35100	BIAS(4)			20 38					—
01	COMP							"	60
02	HD180583	19 11 59	+27 44 59	20 40 51		0 03 E			400
03	COMP							"	60
04	Comp							"	"
05	HD187691	19 46 14	+10 09 55	20 54 32		0 28 E			180
06	COMP							"	60

CCD

~~Spectr.~~ Temp. −100.2°C ..... Dome Temp./Hum. 17.2°C 67.9% Transparency Conditions . Mostly Clear 302

Focus 6.88

Spectr. Temp. ..... Dome Temp./Hum. cc 3503 → 16.0°C / 72.4% FANS OFF

c Lambda 420 0 50 1024 4 1 CCDFMT

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	~~Emulsion~~	~~P.H.~~	Program	Remarks	Quality
	Note Novaguide Probably 6.68			CASSCCD ~~G=5942~~	1800 l/mm G=5942	306u	~6375Å ~~6375Å~~	3/4	focus test	in focus, grating change not much and will help if anything	
				G				1			
					G=5946		6395Å	5			
4600	4"	5.14	G8III					6	Std Vel.		5.6K
								7			
								8			
1945	4"	<V> 7.48	~G0Ib					9	Rm	V350 Sgr	3.7K
								10			
								1			
								11			
2600	3-4"	<V> 6.19	F6I-IIb					12	Rm	V473 Lyr	5.8K
								13			
								14			
2750	4"	V 5.11	F8I					15	Std. Vel		5.8K
								16			

Pg #2 Fri/Sat 303

Date 1995 Sep 1/2 Observers [Rm]/Tn/Smt

Emulsion Batches:

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Comparison Exp.
cc35107	COMP							Fe4r clear	60
08	HD331970	20 08 27	+32 34 16	21 04 59		00 01E			2444
09	COMP							"	60
10	BIAS(4)			21 52					
11	Comp							Fe4r Clear	60s
12	HD203156	21 15 23	+37 49	21 57 08		0 50 E			400
13	Comp							Fe4r Clear	60s
14	Comp							"	"
15	HD214975	22 36 57	+56 19 00	22 13 14		1 36 E			1530
16	COMP							"	60
17	BIAS(4)			22 41					—
18	COMP							"	60
19	HD215159	22 38 15	+53 23 08	22 51 39		1 22 E			180
20	COMP							"	60
21	COMP							"	"

CCD Spectr. Temp. −100.6 °C Dome Temp./Hum. 15.8°C/73.5% Transparency Conditions fine for DDO

Focus 6.68 304

Spectr. Temp. ..... Dome Temp./Hum. 14.9°C/76.4% @Zlac FANS OFF

cd ci 420 0 50 1024 4 1 ccdfmt

Exp. Mtr.	Seeing	√ ~~Pig.~~ Mag.	Sp.	Inst.	Grating/ Tilt	Slit	~~Emulsion~~	P.H.	Program	Remarks	Quality
06 560 FILTER 60				CASS CCD	1800 Rlm G=5946	300μ	6395 Å	17		≈ 170/1 S/N	
7 ~~shutter closed on~~ crash. 2444	3"	9.1 −9.8	F8-G2Ib					18	Rm	MW Cyg ~~spec. catcher material~~ cracked mid-exposure	
60								19			1.7K
								1/2			
60s								20			
3330	3"	5.8 −5.9	F2					21	Rm Pgm	V1334 Cyg	7.0K
								22			
								23			
1525	3"	(√) 8.40	~G0Ib					24	Rm	Z Lac	2.5K
60								25			
								1			
								26		grating cosmic ray col 0-10 row 450-470	
1730 180		√ 6.19	K2					27	Rm	Z Lac velocity comparison	4.4K
								28			
								29			

pg #3 Fri/Sat 305

Date 1995 Sep 1/2 Observers [Rm]/Tn/Sat

Emulsion Batches:

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Comparison Exp
cc35122	HD3712	0 34 50	+55 59 20	23 06 45		3 05 W			40
23	COMP							FeAr clear	60
24-28	FLAT x 5	1st 5 flats are fine.			Note at +3 Tn Found Header Dimensions wrong for cc35128-			Tung Dp	8
29	BIAS(4)								—
CG800 93/96	HD207754	21 46 12	+43 25					4x	67ms
97/98	"				23 34	0 10 W	88° Alt	2x	133ms
cc35130	COMP	note ORDER of Filters as per normal.						FeAr clear	60
131	HD331970	20 08 27	+32 34 16	23 43 59		2 35 W			2248
132	Comp							FeAr Clear	60
133	Comp							9	V
134	HD187691	19 46 14	+10 09 55	00 35 44		3 16 W			303
135	Comp							FeAr Clear	60
136	BIAS(4)			00 43					—
137	Comp							"	60
138	HD180583	19 11 59	+27 44 59	00 48 21		4 09 W			600
139	COMP							"	60

CCD
Spectr. Temp. −100.2°C Dome Temp./Hum. 14.4°C/77.2% Transparency Conditions ... clear

Focus ... 6.68

Spectr. Temp. ... Dome Temp./Hum. 14.1°C/78.3% FANS OFF 306

cλ c 4200 50 1024 4 1 ccdfmt

Exp. Mtr.	Seeing	~~Prg.~~ Mag.	Sp.	Inst.	Grating/ Tilt	Slit	~~Emulsion~~	P.H.	Program	Remarks	Quality
OG 560 Filter 9780	?	2.23	K0 IIIa	CASS CCD	1800 Å/mm G=5946	306μ	6395	30	Std. Vel	α CAS, tracked.	~9K
								31			
								32		GPIB error killed last 2 original flats (old 29/10) →	12.4K
								1		Did a focus test and lost it due GPIB errors came. Still in focus.	
	3"	7.32	K0III	LeVeed TV GUIDER	ABOVE 306μ SLIT			—	Seeing test	Dome W, light NNE wind, clear	
								—	" "		
				CASS CCD				3			
1156 By 0016 Sp Control fail 4AD	3"-4"	9.1 - 9.8	F8-G2Ib					4	Rm pgm	Repeat of earlier exposure	
								5			2K
								6			
3900		✓ 5.11 B6	F8V					7	Std vel	repeat	6.4K
								8			
								1/2			
								9			
3270	4"-5"	<✓> 6.19	F6I-IIa					10	Rm	V473 Lyr	

Pg#4 Fri/SAT 307

Date 1995 Sept 12 Observers [illegible] J. Tu / Scott

Emulsion Batches:

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Comparison Exp
CC35140	Comp							Fea clear	60
41	VY Per	2 20 19	+58 28 06	1 13 33		1 54 E			3200
42	COMP							"	60
43	BIAS(4)			2 10					—
44	COMP							"	60
45	HD25361	3 56 42	+58 23	2 14 19		2 57 E			1599
46	COMP							"	60
47	COMP							"	"
48	HD30282	4 41 06	+36 32	2 48 01		3 12 E			1265
49	COMP							"	60
50	BIAS(4)			3 11					—
51	COMP							"	60
52	HD44990	6 19 49	+7 08 25	3 24 31		4 17 E			805
53	COMP							"	60
54/55	In Board / Out Board					0 0	30°	"	60/60

Spectr. Temp. ..... Dome Temp./Hum. 13.4°C/81.2% Transparency Conditions .. clear, humid, partly cloudy

Focus ..... 6.68 .....

Spectr. Temp. ..... Dome Temp./Hum. +12.8°C 81.7% H

308

420 0 50 1024 4 1 ccdfat

Exp. Mtr.	Seeing	~~Ptg~~ Mag.	Sp.	Inst.	Grating/ Tilt	Slit	~~Emulsion~~	P.H.	Program	Remarks	Quality
OG 560 FILTER				CASS CCD	1800 l/m G: ~~5946~~ 5946	306μ	~~6420~~	12			
420	3"	10.8- 11.66	F5-F9				6395Å	13	Rm	some thick clouds to east & dispersed in Per in about 5 min	700 secs 60
								14		95% on catwalk	
								1			
								15			
3300	3-4"	7.30 -8.07	F6Ib- G2Ib					16	Rm	RX Cam	5.5K
								17			6.7K
								18			
3000	?	B 7.9 -8.8	F6- G1					19	Rm	AW Per cloud for a bit	6K
								20			
								1			
								21		waited ~5m for clouds to pass	
3000	5"	B 6.5 -8.0	F7Iab -K1Iab					22	Rm	T Mon most of season, lots of retractions.	5.5K
								23			
	All To D:\To-CDROM\sepCas = Persaus and DAT							24/25	focus test	set for slightly warmer temps	

[Sat/Sun] 309

Date 1995 September 2/3 Observers [Blu] Smt

Emulsion Batches:

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Comparison Exp.
cc3515 6/57	INBOARD/OUTBOARD	HARTMANN						FeAr clear	60/65
58	BIAS(4)			23 01					—
59-61	FLAT x 3					00h00m01s W	+43° 58'	Thru ¼ Aop	9
62-64	FLAT x 3					"	"	"	6
65	BIAS(4)			23 18					—
66-68	FLAT x 3					"	"	"	4.5
69-71	FLAT x 3					"	"	"	2.2
72	BIAS(4)			23 29					
73	COMP			23 31				FeAr clear	60

Spectr. Temp. -100.6°C Dome Temp./Hum. 17.5°C / 64.6 % Transparency Conditions .. cloudy - dome closed.

Focus 6.68

Spectr. Temp. ..... Dome Temp./Hum. .....

310

420 0 50 1024 4 1 ccdfmt

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	~~Emulsion~~ cm	~~P.H.~~ ci	Program	Remarks	Quality
				CASS CCD	1800 l/mm G=6100	30 μm	6603 Å	3/4	FOCUS TEST	right in focus.	16K → 15.3K
							(6604 Å @ ~~row~~ row 506)	1			
								5	Bln	as close to saturation as possible	
								6	Bln	$\sqrt{2}$ weaker than saturation (1st set)	10.6K → 10.3K
								1			
← tscale set to 10050 exptime says 45 sec.								7	Bln	½ ~~weaker~~ strength of 1st set.	8.0K → 7.7K
← tscale set to 100 so exptime says 22 sec.								8	Bln	¼ strength of 1st set.	4.0K → 3.9K
								1			
← tscale set to 1000 again.								9			

311

pg#1 Mon [Labor Day] / Tues

Date 1995 Sep 4/5 Observers [Bln] Ta

Emulsion Batches:

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Comparison Exp
CC3517 4/5	In Board / Out Board			19 33		00 03W	42 33'	FeAr clear	60/65
76	BIAS(4)								
77	Comp							FeAr clear	60s
78	HD177724	19 00 49	+13 42 53	19 47 45		00 38 E			55
79	Comp							FeAr clear	60
80	Comp							"	"
81	HD186205	19 37 54	+8 59 00	19 56 15		00 36 E			1957
82	Comp							"	60s
83	Comp							"	"
84	HDE235679	21 55 00	+54 00 00	20 39 28		02 04 E			2271
85	Comp							"	60s
86	BIAS(4)			21 21					
87	Comp							"	60s
88	HD187691	19 46 14	+10 09 55	21 37 56		00 22W			179
89	Comp							"	60s

CCD Spectr. Temp. −100.5 °C Dome Temp./Hum. 19.6°C 57% Transparency Conditions Fine 312

Focus 6.68 90 c gain

CCD Spectr. Temp. −100.5°C Dome Temp./Hum. c Lambda

That Hot Pixel on Col 26, Row 144
420 0 50 1024 4 1 CCDFMT

Exp. Mtr.	Seeing	Pwr. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
OG 560 Filter				CASSCCD	1800 l/mm *G=6100	306u	6603Å	3/4	focus test		MAX ADU
					*(unchanged From previous night)			1/2			
								5			3.5K
5000	OK	2.99	A0 V n					6	Telluric Std	Air mass = 1.173	10K
								7			3.6K
								8			
1360	2"-3"	8.43	B2 V					9	Bln He Star	> 170/1 S/N Air mass = 1.250	
								10			
								11			
1600	2"-3'	8.86	B2.5 I b					12	Sp Bin Bln	Hd strong Em max 16K but not saturated at start Air mass 1.130	
								13			
								1/2			
								14			
3400		5.11	F8 V					15	Std Vel		12K

pg#2 Mon/Tues 313

Date 1995 Sep 4/5 Observers [B.M.] Th

Emulsion Batches:

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Comparison Exp.
CC35190	Comp							FeAr Clear	60s
91	HD177724	19 00 49	+13 42 53	21 45 12					50
92	"	"	"	21 50 26				"	45s
93	Comp								60s
94/03	FLATS x10					01 26 W	+17°	TWG Ap=1/4	9
04	Comp							FeAr Clear	60
05	HD186205	19 37 54	+8 59 00	22 13 05		01 44 W			2172
06	Comp							FeAr Clear	60
07	BIAS(4)			22 52					
08	Comp							FeAr Clear	60s
CC35209	BD+17 4572	21 19 21	+17 51	22 58 10		00 45 W			1983
10	Comp							"	60s
11	Comp							"	"
12	HD214946	22 36 42	+44 29	23 51 40		00 01 W			764
13	Comp							FeAr Clear	60s

Spectr. Temp. ..... Dome Temp./Hum. +18.4°C ... 57%H Transparency Conditions ... OK, ... slight haze .....

Focus .... 6.62 .....

Spectr. Temp. ..... Dome Temp./Hum. ..... increasing cloud 314

Clambala

Exp. Mtr.	Seeing	P.V. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
06560 Filter				CASSCCD	1800 l/mm G=6100	306	6603A	17	-	-	
5200		2.99	AOV					18	Telluric Std	AIR in ASS = 1.21 2nd exposure of night	12K
5000		"	"					18	" "	Better column centering	16K
								19			
								20		/	15.3K
								21			
1650	2-3"	8.43	B2V					22	Bln He star	2nd exp of night AIR Mass = 1.27.	3.2K
								23			
								1/2			
								24			
1100	2-3"	8.98 -9.47		-				25	Cepheid Unk AU Peg (Stellar Rendezvous exp. very wavy slow)	Field Drawn just in case	2.6K
								26			
								5			3.7K
2400	3"	B 7.26	A5					6	b/n	Blue pgm star X	7.4K
								7		X Hα & 6678Å look doubled.	3.64K

P43 315

Date 1945 Sep 4/5 Observers (Bh) T.G.

Emulsion Batches:

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Comparison Exp.
CC35214	Bills(4)					00 03W	+45°		
CG80099/02	HD214946	22 36 42	+44 29					4×	67 sec
CG80103/04	"	"	"			00 11W		2×	133 sec
CC35215	Comp							FCA Chart	60s
16	HD222368	23 34 46	+05 05 03	00 23 00		00 36E			
17	Comp							"	60
18/19	Inboard/outboard Hartmann					00	+30°	FCA Chart	60/65

Spectr. Ten
Focus
Spectr. Ten
Comp Mtr
3850
1179

Spectr. Temp. ..... Dome Temp./Hum. ~~+18°C~~ ..... ~~60%~~ Transparency Conditions ~~Clearing in~~ .....
High Cirrus from SW

Focus ~~6.68~~ .....

Spectr. Temp. ..... Dome Temp./Hum. ..... clear

316

Exp. Mtr.	Seeing	Pfg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	~~Emulsion~~	P.H.	Program	Remarks	Quality
				CASSCCD	1800 l/mm G-6100	306u	6603Å	1/2			
	2-3"	B 7.26	A5		Above 306u slit				Seeing test	Dome NW, no wind	
									" "		
		~~4.13~~	~~F7V~~					8			
3850		4.13	F7V					9	stlvel	some cloud	
								10			
+17.9°C		6.68	set					3/4	focustest		
		All to	DAT,	Perseus,	D:\	To_CDRom		SEPCASS			

pg #1 Tues/wed 317

Date 1996 Sep 5/6 ... Observers {Vgs} ... Tn .....

Emulsion Batches:

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Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Comparison Exp.
cc 35220	BIAS x 4	(Sum of 4 biases for Vgs pgm)							
21/22	Inboard/outboard						45°	FeNe Clear	20/35
23	Comp							"	25s
24	BD+45 2743	18 32 26	+45 39 53	19 37 34		00 12W			172s
25	Comp							FeNe Clear	25s
~~27~~	Comp	* (too late, to REWRITE frame in sequence)						"	"
~~28~~	AC +63 32399	23 02 02	+63 23 24	20 27 54		03 20E			2232
~~29~~	Comp							FeNe Clear	25s
26	BIAS x 4	Had to Renumber, by over writing bad file # cc35226		21 08					
30	Comp							"	25s
31	BD+57 2735	23 19 54	+57 20 00	21 16 32		02 55E			1899
32	Comp							"	25s
33	Comp							"	"
34	HD 1326	00 12 58	+43 27 44	21 55 18		03 30E			692
35	Comp							"	25s

CCD
Spectr. Temp. -100.2°c Dome Temp./Hum 19.3 80% H Transparency Conditions Clearing up

Focus 6.6.8 90 c gain 318

Spectr. Temp. Dome Temp./Hum. c Lambda 420 0 50 1024 4 1 CCD Emt MAX ADU

Exp. Mtr.	Seeing	Pic. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
no filter				CMSS CCD	1800 l/mm G=5153	306-	5302Å	1/2			
	19.3 6.68							3/4		Forgot Flat Moon → Full.	
								5		not so good for Faint pgm.	7.5K
1000	<3"	7.83	M0					6	Marcy Std vel	75/1 S/N	
								7			
								8		X Had to Reset ACER and Monitor and Repeat. Nasty "GPIB"	7.8K
640	2-4"	10.8	M0					2	Vgs 858	750/1 S/N	
								3			
								1/2			
								4			
1070	3"	10.05	M2e					5	Vgs 211	180/1 S/N	
								6			
								7			7.3K
2000	2-3"	8.07	M1 Ve					8	Marcy Std vel		

Pg #2 Tues/Wed 319

Date 1995 Sep 5/6 Observers {VgS} T.A.

Emulsion Batches:

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Comparison Exp.
cc35236	BiHS x 4			2209					
37	Comp							FeNe Clear	25s
38	AC+18 1074-63	22 2356	+18 2518	222019		00 52E			2088
39	Comp							FeNe Clear	25s
40	Comp							"	"
41	HP216899	22 5148	+16 0200	230228		00 68E			"
42	Comp							"	25
	~~Comp~~	Too Humid & foggy to go for seeing test intended.							
43/61	FLATS x 9					00 54E	+17°	TUNG Hp1/2	5s
52/53	Inboard / Outboard	Hartmann				"	"	FeNe Clear	20/35
54	BiHS x 4			2332					

Spectr. Temp. ...-101.2°C..... Dome Temp./Hum. 11.8°C...90%H Transparency Conditions ..Slightly hazy - foggy.....

Focus ...6.68.....

Spectr. Temp. ..... Dome Temp./Hum. 17.7°C...92%H

320 MAX ADU

Exp. Mtr.	Seeing	Pix/Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
no filter				CHSSCCD	1800 l/mm G=5153	300	5302Å	1/2			
								10			
611	3"-4"	10.7	MO					11	Vys 841		
								12		Hi-Sp contr failure	
								13			70K
1500	3"	8.66	M2					14	Mercy Sat Level	100/1 S/N	
								15			
								16/17			12K
								18/19	focus test		
		All	to	DAT & Perseus,	D:\	To	CORam	etc.			

pg #1 [Thu/Fri] 321

Date 1995 September 7/8 Observers [Rm] Smt

Emulsion Batches:

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Comparison Exp.
cc 35255/56	INBOARD/OUTBOARD	HARTMANN						Fe/Ar clear	50/60
57	BIAS(4)			21 25					—
58	COMP							"	60
59	HD180583	19 11 59	+27 44 59	21 40 09		1 34 W			1200
60	COMP							"	60
61	BIAS(4)			22 04					—
62	COMP							"	60
63	HD187691	19 46 14	+10 09 55	22 09 58		1 17 W			480
64	COMP							"	60
65	COMP							"	"
66	HD331970	20 08 27	+32 34 16	22 29 19		1 59 W			3100
67	COMP							"	60
68	BIAS(4)			23 24					—
69	COMP							"	60
70	HD203156	21 15 23	+37 48 55	23 31 21		1 12 W			600
71	COMP							"	60

CCD
~~Spectr~~. Temp. ..-.100°C..... Dome Temp./Hum. 11.0°C/73.2% Transparency Conditions ..just cleared, full moon....
@ FOCUS TEST AWFUL seeing, humid.
Focus .....6.76..... FANS OFF 327
Spectr. Temp. ..... Dome Temp./Hum. ..... cλ ci 420 0 50 1024 4 1 ccdbat

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
OG 560 FILTER				CASS CCD	1800 l/m G=5946	306μ	6400 Å @ c.1512	3/4	FOCUS TEST	Set a bit cool but T dropping fast.	
								1			
								5			
4100	>7"!	⟨V⟩ 6.19	F6I-IIb					6	Rm	V473 Lyr. pretty strong contour-cats	6-1K
								7			
								1			
								8			
4100	6-7"	V 5.11	F8V					9	Std Vel	Seeing getting a bit better, but not much.	5.5K
								10			
								11			
1171	5-6"	V 9.1-9.8	F8-G2Ib					12	Rm	MW Cyg auto-guided with SBIG ST-4	1.6K
								13			
								1			
								14			
3180	6"	V 5.8-5.9	F2					15	Rm	V1334 Cyg R/H getting very high cats/sky, still clear inside.	4.8K
								16			

pg #2 323

Date 1995 September 7/8 Observers [Rm] Smt

Emulsion Batches:

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Comparison Exp
cc35272	COMP							Fe Ar clear	60
73	HD214975	22 36 54	+56 19	23 49 54		0 19 W			1200
74	COMP							"	60
75	BIAS(4)			0 16					—
76	COMP							"	60
77	HD215159	22 38 15	+53 23 08	0 19 06		0 35 W			500
78	COMP							"	60
79	COMP							"	"
80	HD223094	23 41 30	+28 09	0 40 02		0 09 E			450
81	COMP							"	60
CG80105-08	HD223094 x4	23 41 30	+28 09					..	.067
109/110	" x2				0 57	0 01 W	75° Alt		.133
cc35282	BIAS(4)			1 00					—
83-91	FLAT x 9					0 0 1 W	+28°	Tung Ar Ag	7
92/93	INBOARD/OUTBOARD	HARTMANN						Fe Ar clear	50/60

~~Spectr.~~ CCD Temp. -100.7°C Dome Temp./Hum. 8.2°C/78.2% Transparency Conditions. clear, full moon, getting wet outside due to R/H.

Focus 6.76

~~Spectr.~~ CCD Temp. -100.5 Dome Temp./Hum. 7.7°C/79.6% @ seeing test FANS OFF (324)

420 0 50 1024 4 readout

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	~~Emulsion~~	~~P.H.~~	Program	Remarks	Quality
OG 560 FILTER				CASS CCD	1800 ll/mm G=5946	30μm	6400 Å	17			
1109	5"	<V> 8.40	~G0Ib					18	Rm	ζ Lac spec. auto crashed during exposure but exp. ctr. shutter stayed open.	19K
								19			
								1			
								20			
3630	5"	V 6.19	k2					21	Rm	ζ Lac velocity comparison	6.7K
								22			
								23			
1400	5"	V 7.45	kSIII					24	Std. Vel		2.5K
								25			
	5"	V 7.45	kSIII	EEV CCD TV GUIDER		above 30μm		—	SEEING TEST	Dome SSSW, no wind, cleared VERY quickly @ 20:30 after days of cloud & storm 96% on catwalk	
		"	"					—	"		
								1		dome closed now.	
								26			11.7K → 11.1K
			All to	DAT, D:1 & M:CASS.				3/4	FOCUS TEST	T = 8.0°C set warm now by the same shift as it was cool at start of night	

pg #1 Fri/Sat (325)

Date 1995 September 8/9 Observers [Rm] Smt

Emulsion Batches:
During the day, frame grabber darks taken by KK.
c.g80111.fts → c.g80116.fts

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Comparison Exp.
cc35294/95	INBOARD/OUTBOARD	HARTMANN						FeAr clear	50/60
96	BIAS(4)			20 04					—
97	COMP							"	60
98	HD173297	18 39 24	-20 45	20 10 03		0 40 W			1300
99	COMP							"	60
cc35300	COMP							"	"
01	HD171391	18 29 29	-10 03 19	20 38 06		0 59 W			180
02	COMP							"	60
03	COMP							"	"
04	HD180583	19 11 59	+27 44 59	20 48 18		0 37 W			690
05	COMP							"	60
06	BIAS(4)			21 02					—
07	COMP							"	60
08	HD187691	19 46 14	+10 09 55	21 07 49		0 13 W			181
09	COMP							"	60

CCD
~~Spectr.~~ Temp. -99.3°C Dome Temp./Hum. 12.6°C/69.2% @ FOCUS TEST Transparency Conditions: just cleared, full moon..

Focus 6.76 FANS ON (326)

Spectr. Temp. ..... Dome Temp./Hum. ..... 420 0 50 1024 4 1 coadd

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	~~Emulsion~~	P.H.	Program	Remarks	Quality
OG 560 FILTER				CASS CCD	1800 ℓ/mm G=5946	306μ	6400Å	3/4	FOCUS TEST	set cool but T should really drop	
								1			
								5			
1950	3"-4"	<V> 7.48	~GOIb					6	Rm	V350 Sgr	4.1K
								7			
								8			
3280	3"	V 5.14	G8III					9	Std. Vel	close by V350 Sgr	6.0K
								10			
								11		N DOME FAN ON ONLY	
4730	3"	<V> 6.19	F6I-IIb					12	Rm	V473 Lyr	10.0K
								13			
								1			
								14			
2600	3"-4"	V 5.11	F8V					15	Std. Vel		5.4K
								16			

pg #2 327

Date 1995 September 8/9 Observers [Rm] Smt

Emulsion Batches:
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Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Comparison Exp.
cc35310	COMP							FeAr clear	60
11	HD331970	20 08 27	+32 34 16	21 23 40		0 38 W			2000
12	COMP							"	60
13	BIAS(4)			22 01					—
14	COMP							"	60
15	HD194071	20 18 30	+27 55	22 06 57		0 53 W			900
16	COMP							"	60
17	COMP							"	"
18	HD203156	21 15 23	+37 48 55	22 31 45		0 13 W			450
19	COMP							"	60
CG80119-20	HD207754 x4	21 46 12	+43 25						.067
CG80121/22	" x2				23 03	0 06 W	89° Alt		.133
20	BIAS(4)			23 10					—
21	COMP							FeAr clear	60
22	HD214975	22 36 54	+56 19	23 18 17		0 04 E			1500
23	COMP							"	60

CCD
~~Spectr.~~ Temp. -100 Dome Temp./Hum. 10.8°C/72.5% Transparency Conditions clear, full moon (328)

Focus 6.76 NORTH DOME FAN ON ONLY

Spectr. Temp. Dome Temp./Hum. 10.2°C/72.4% @ seeing test 420 0 50 1024 4 1 ccdfat

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	~~Emulsion~~	P.H.	Program	Remarks	Quality
OG 560 FILTER				CASS CCD	1800 ℓ/mm G=5946	30μm	6400 Å	17		reset spec. controller due to multiple failures.	
1222	3"	V 9.1-9.8	F8-G2Ib					18	Rm	MW Cyg	2.3K
								19			
								1		low flying plane travelling W→E flew right through zenith @ 22:04 (ct)	
								20			
1605	3-4"	V 8.13	G8III					21	Std. Vel	seeing not as good here now.	4.2K
								22		grazing cosmic ray cols 37-39	
								23		spec. controller failed beforehand	
4130	3"	V 5.8-5.9	F2					24	Rm	V1334 Cyg	11.4K
								25			
	2-3"	V 7.32	K0III	EEV CCD TV GUIDER		above 30μm		–	SEEING TEST	Done W, very light SW wind, CLEAR, 85% catwalk R/H	
								–	"	full moon – some program problems	
								1			
								26			
1968	2-3"	<V> 8.40	~G0Ib					27	Rm	Z Lac very thin cloud	5.6K
								28			

pg #3 (329)

Date 1995 ~~September~~ 8/9 Observers [Rm.] Smt ... iks. as safety backup

Emulsion Batches:
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Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Comparison Exp.
cc35324	COMP							FeAr clear	60
25	HD215159	22 38 15	+53 23 08	23 50 35		0 07 W			300
26	COMP							FeAr clear	60
27	BIAS(4)			23 59					—
28	COMP							"	60
29	HD3712	0 34 50	+55 59 20	0 06 14		1 40 E			530
30	COMP							"	60
31	COMP							"	60
32	VY PER	2 20 19	+58 28 04	0 19 24		2 44 E			1800
33	COMP							"	60
34	VY PER			0 53 57		2 00 E			2400
35	COMP							"	60
36	BIAS(4)			1 38					—
37	COMP							"	60
38	HD25361	3 56 42	+58 23	1 45 34		3 10 E			900
39	COMP							"	60

Spectr. Temp. ..... Dome Temp./Hum. 10.0°C / 71.6% Transparency Conditions . a few thin clouds, full moon

Focus ..... 6.76 ..... N FAN ON (330)

Spectr. Temp. ..... Dome Temp./Hum. ..... cλ ci 420 0 50 1024 4 1 ccdfast

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	~~Emulsion~~	P.H.	Program	Remarks	Quality
OG 560 FILTER				CASS CCD	1800 g/mm G=5846	30μ	6400 Å	29			
3220	2"-3"	V 6.19	K2					30	Rm	ζ Lac velocity comparison	10.7K
								31			
								1			
								5			
8700	3"	V 2.23	K0⁻IIIa					6	Std. Vel	α Cas, trailed	10.3K
								7			
								8			
765	2"-3"	V 10.9-11.66	F5-F9					9	Rm	VY Per Used SBIG ST-4 to autoguide, it kept trailing star off slit near end of exposure.	500 above blg
								10			
380								12	Rm	2nd time around guided manually grating cosmic ray in spectrum on 21, mark	600 above blg 20-22
								13			
								1			
								13			
2235	3"	V 7.30-8.07	F6Ib-G2Ib					15	Rm	RX Cam	6.1K
								16			

Pg # 4 (331)

Date 1995 September 8/9 Observers [Rm.] Smt

Emulsion Batches:
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Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Comparison Exp.
cc35340	COMP							Fe Ar clear	60
41	HD30282	4 41 06	+36 32	2 16 21		3 22 E			900
42	COMP							"	60
43	BIAS(4)			2 35					—
44	COMP							"	60
45	HD29587	4 34 30	+41 57	2 42 28		2 54 E			660
46	COMP							"	60
47	COMP							"	"
48	HD44990	6 19 49	+7 08 25	3 06 12		4 14 E			600
49	COMP							"	60
50-58	FLAT x 9					0 00	+34°	Tung ¼ Ap	7
59	BIAS(4)			3 28					—
60/61	INBOARD/OUTBOARD	HARTMANN						Fe Ar clear	50/60

Spectr. Temp. ..... Dome Temp./Hum. 9.4°C/75.0% Transparency Conditions clear, full moon

Focus 6.76

Spectr. Temp. ..... Dome Temp./Hum. 9.0°C/79.8% @ FLATS

(332)

cd 1 420 0 50 1024 4 1 ccdtest

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
				CASS CCD	1800 l/mm G=5946	306μ	6400 Å	17			
2670	3"-4"	B * 7.1-8.8	F6-G1					18	Rm	AW Per * still seems brighter	6.7K
								19			
								1			
								20			
1856	3"	V 7.29	dG2					21	Std. Vel.		9.1K
								22		grazing cosmic ray cols 5-6 rows 898-910	
								23			
3050	4"-5"*	B 6.5-8.0	F7 Iab - K1 Iab					24	Rm	T Mon * some retraction	7.4K
								25			
								26			11.4K → 10.9K
								1			
		All to DAT, D:\ & M:\						3/4	FOCUS TEST		

PJ #1 (333)

Date 1995 ~~September~~ 9/10 Observers [Rm] Smt + Robert Thurston

Emulsion Batches:
2 large twin visual
MS7

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Comparison Exp.
cc35362/63	INBOARD/OUTBOARD							Feather clear	50/60
64	BIAS(4)			22 38					—
65	COMP							"	60
66	HD180583	19 11 59	+27 44 59	22 47 42		2 39 W			600
67	COMP							"	60
68	COMP							"	"
69	HD187691	19 46 14	+10 09 55	23 07 34		2 19 W			285
70	COMP							"	66
71	BIAS(4)			23 18					—
72	COMP							"	60
73	HD331970	20 08 27	+32 34 16	23 27 09		2 50 W			2223
74	COMP							"	60
75	BIAS(4)			0 08					—
76	COMP							"	60
77	HD203156	21 15 23	+37 48 55	0 26 48		2 14 W			550
78	COMP							"	60

CCD
~~Spectr.~~ Temp. ..-100°C..... Dome Temp./Hum. 12.3°C/73% Transparency Conditions a few fast moving, low c.lands..... full moon. windy

after focus test

Focus .....6..26.....

Spectr. Temp. ..... Dome Temp./Hum. .....

334

420 0 50 1024 4 1 redhat

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	~~Emulsion~~	P.H.	Program	Remarks	Quality
				CASS CCD	1800 gr/m G=5946	30μm	6400Å	3/4	FOCUS TEST		
								1			
								5			
4300	3"-4"	<V> 6.19	F6I-II6					6	Rm	V473 Lyr	9K
								7			
								8			
4500	4"	V 5.11	F8V					6	Std. Vel	overwrote last one readout in wrong cache!	9.8K
								8			
								1			
								9			
1125	5"	V 9.1-9.8	F8-G1V6					10	Rm	MW Cyg windy	2.3K
								11			
								1			
								12			
3830	5"	V 5.8-5.9	F2					13	Rm	V1334 Cyg	9.0K
								14			

Pg #2 (335)

Date 1995 September 9/10 Observers [Rm]. Smt + Robert Thurien

Emulsion Batches:
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Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Comparison Exp.
	~~COMP~~								
CG80123-26	HD223094 x4	23 41 30	+28 09						.067
27/28	HD223094 x2				0 49	0 01 W	75° Alt +29°		.133
cc35379	COMP							Feather clear	60
80	HD223094	23 41 30	+28 09			0 18 W			630
81	COMP							"	60
82	BIAS(4)			1 09					—
83	COMP							"	60
84	HD214975	22 36 54	+56 19	1 17 48		1 55 W			1200
85	COMP							"	60
86	COMP							"	"
87	HD215159	22 38 15	+53 23 08	1 47 09		2 07 W			240
88	COMP							"	60
89-97	FLAT x9							Tung V4 Ap	8
98	BIAS(4)			2 18					—
99/cc35400	INBOARD/OUTBOARD							Feather clear	50/60

(EED)
Spectr. Temp. −100.9°C Dome Temp./Hum. 9.3°C / 72.4% after seeing test Transparency Conditions full moon, clear, a few clouds last from NW.

Focus 6.76 FANS OFF 336

Spectr. Temp. ..... Dome Temp./Hum. 7.7°C / 72.4% @ focus test

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
	3"-4"	∨ 7.45	KSIII	EEV CCD TV GUIDER		about 3/4mm		–	SEEING TEST	Done SSW, medium SE wind clear, full moon, wind is a problem tonight so seeing is variable	
	4"							–	"		
OG 560 FILTER								15			
2830		∨ 7.45	KSIII					16	Std Vel		
								17			
								1			
								18			
1240		<∨> &40	~60Å					19	Rm	Z Lac	2.5k
								20			
								21			
2400	5"	∨ 6.19	k2					22	Rm	Z Lac velocity comparison	5.5k
								23			
								24			15.4k → 12.4k
		All to DAT, D:\, M:\						1			
								3/4	FOCUS TEST	still in focus now!	

pg #1

337

Date 1995 September 10/11 Observers [Blm] Smt

Emulsion Batches:

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Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Comparison Exp
CC35401/02	INBOARD/OUTBOARD	HARTMANN						Fe Ar clear	60/60
03	BIAS(4)								—
04	COMP							"	60
05	HD172187	18 33 42	+43 08 12	19 55 39		0 21 W			300
06	COMP							"	60
07	COMP							"	60
08	HD177724	19 00 49	+13 42 53	20 04 50		0 01 W			45
09	COMP							"	60
10	COMP							"	"
11	HD186205	19 37 54	+8 59	20 26 55		0 15 W			1800
12	COMP							"	60
13	HD186205			21 03 05		0 45 W			1400
14	COMP							"	60
15	HD186205			21 31 58		1 05 W			800
16	COMP							"	60

CCD Spectr. Temp. -100.4°C Dome Temp./Hum. 11.3°C/56.3% Transparency Conditions clear

Focus 6.76 FANS ON 338

Spectr. Temp. ..... Dome Temp./Hum. ..... cλ ci 420 0 50 1024 4 1 ccdfmt

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	~~Emulsion~~	P.H.	Program	Remarks	Quality
OG 560 FILTER				CASS CCD	1800 ll/mm G=6100	30μm	6603 Å	3/4	FOCUS TEST	maybe a bit cool. chip still cooling from ~-85°C	
								1			
								5			
1850	3"	6.26	FOV					6	Bln Blue pgm	norm'n star anyway. not much there at a glance	4.2K
								7			
								8			
5000	4"	2.99	AO V					9	Telluric Std.		14.8K
								10			
								11		many spec. contr. failures beforehand.	
1155	3"	8.43	B2 V					12	Bln - He*		2.6K
								13		many more spec. contr. failures beforehand.	
140 after 200 seconds	3"	"	"					12	Bln - He*	2nd exposure, shorter this time. spec. contr. failed and left strongest col same as hot pixel.	2.2K
								13			
500		"	"					12	Bln - He*	less cosmic rays this way	1.2K
								13			

Pg #2 359

Date 1995 September 10/11 Observers [Blank] Smt / Mki

Emulsion Batches:

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Comparison Ex
cc35417	BIAS(4)			21 50					—
18	COMP							Feb Clear	60
19	HD235679	21 55 00	+54 00	22 13 58		0 13 E			1800
20	COMP							"	60
21	BIAS(4)			22 47					—
22	COMP							"	60
23	HD218153	23 00 36	+25 29	23 03 24		0 45 E			930
24	COMP							"	60
25	COMP							"	"
26	HD209833	22 01 03	+28 28 41	23 28 02		0 32 W			460
27	COMP							"	60
28	BIAS(4)			23 38					—
29-31	FLAT x 3							Tung 1/4 Ag Fe An	7
32	COMP								60
33	BD+16 516	3 44 43	+16 51 06	23 55 03		4 38 E			900

Spectr. Temp. ..... Dome Temp./Hum. 9.6°C/60.1% Transparency Conditions . clear., full moon rising.....

Focus .....6.7.6.....

Spectr. Temp. ..... Dome Temp./Hum. ..... FANS on 340

420 0 50 1024 4 1 coadds

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	~~Emulsion~~	~~P.H.~~	Program	Remarks	Quality
				CASS CCD	1800 l/m G=6100	30μm	6603°A	1			
								14			
970	3"	V 8.86	B2.5Ib					15	Bln SB	Hα emission >3x cont	6.4K
								16			
								1			
								17			
2300	~~Hα~~	V 7.6	G8III					18	Mki	only star in field bright enough - a bit of Hα emission	5.5K
								19		cosmic ray	
								20			
3380		V 5.63	B9V n					21	Telluric Std.		8.1K
								22			
								1			
								23			12.7K → 12.3K
								24			
276	3"-4"	V 9.40-9.71	O6.5f KOI+neb					25	Mki	V471 Tau F' series	

Pg #3 341

Date 1995 September 10/11 Observers Mki / Smt

Emulsion Batches:

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Comparison Exp.
cc35434	BD+16 516	3 44 43	+16 57 06	00 11 06					900
35	"			00 26 27					"
36	"			00:41:49		~3 52 E			"
37	COMP							FeAr clear	60
38-40	FLAT x 3							Tung ¼ Ap	7
41	BIAS(4)			102					—
42	COMP							FeAr clear	60
43	BD+16 516	3 44 43	+16 57 06	1 05 16		3 28 E			900
44	"			1 20 37		3 13 E			900
45	"			1 35 59		3 57 E			900
46	"			1 51 21		2 42 E			900
47	COMP							FeAr clear	60
48-50	FLAT x 3							Tung ¼ Ap	7
51	BIAS(4)			2 11					—
52	COMP							FeAr clear	60

Spectr. Temp. -100 °C Dome Temp./Hum. 8.7°C/67.1% Transparency Conditions ..clear, full moon.....

Focus ..... 6.76 ..... N FAN ON ONLY 342

Spectr. Temp. ..... Dome Temp./Hum. ..... 420 0 50 1024 4 1 crdfat.

Exp. Mtr.	Seeing	~~V Dia~~ Mag.	Sp.	Inst.	Grating/ Tilt	Slit	~~Emulsion~~	P.H.	Program	Remarks	Quality
375	3"	9.40 – 9.71	0.65× KOI+red	CASS CCD	1200 l/mm G=6100	30 km	6603 Å	25	Mk.	1st series V471 Tau using v471 tau.bat	
410								25	"	"	
400								25	"	"	
								26			
								27			12.7K →12.2K
								1			
								28			
430	2"-3"	9.40 – 9.71	0.65× KOI+red					29	Mk.	2nd series cosmic ray on He emission? V471 Tau ↑ probably this one	
437	"	"	"					29	"	"	
450	"	"	"					29	"	"	
458		"	"					29	"	"	760 ~~Hα~~ Hδ
								30			
								31			12.6K →12.1K
								1			
								30			

pg # 4 343

Date 1995 September 10/11 Observers Mki / Smt

Emulsion Batches: .....

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Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Comparison Exp
cc35453	BD+16 516	3 44 43	+16 57 06	2 16 00					900
54	"			2 31 22					"
55	"			2 46 43					"
56	"			3 02 05		1 31 E			"
57	COMP							FeAr clear	60
58-60	FLAT x3							Tung ¼ Ap	7
61	BIAS (4)			3 23					—
62	COMP							FeAr clear	60
63	BD+16 516	3 44 43	+16 57 06	3 26 26					900
64	"			3 41 48					"
65	"			3 57 10					"
66	"			4 12 31		0 20 E			"
67	COMP							FeAr clear	60
68-70	FLAT x3							Tung ¼ Ap	7
71	BIAS (4)			4 32					—

Spectr. Temp. −100°C Dome Temp./Hum. 8.3°C/73.4% Transparency Conditions ..clear, full moon.....

Focus .....6.76..... N FAN ON 344

Spectr. Temp. ..... Dome Temp./Hum. ..... d i 420 0 50 1024 4 1 ccdfast

OG 560 Exp. Mtr. FILTER	Seeing	V ~~Big~~ Mag.	Sp.	Inst.	Grating/ Tilt	Slit	~~Emulsion~~	P.H.	Program	Remarks	Quality
453	2"-3"	9.40 -9.71	0.65* KOST+red	CASS CCD	1800 l/mm G=6100	30μ	6603Å	32	MKi	3rd series V471 Tau using V471 tau.bat	
400	"	"	"					32	"	"	
409	"	"	"					32	"	"	
440		"	"					32	"	"	1.3K @ Hα
								33			
								31			12.1K
								1			
								5			
470	2"-3"	9.40 -9.71	0.65* KOST+red					6	MKi	4th series V471 Tau still okay v471tau.bat	
489		"	"					"	"	"	
480		"	"					"	"	"	
457	2-3	"	"					"	"	" cosmic ray in Hα emission.	
								7			
								8			12.7K →12.2K
								1			

pg #5 345

Date 1995 September 10/11 Observers Mki / Smt

Emulsion Batches:

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Comparison Exp.
cc35472	COMP							Fe Ar clear	60
73	BD+16 516	3 44 43	+16 57 06	4 35 21					900
74	"			4 50 43					"
75	"			5 06 05		0 33 W			"
76	" + SK Y			5 21 26					600*
77	COMP							"	60
78-80	FLAT x 3							Iris 4 Ap	7
81	BIAS (4)			5 42					—
82-90	FLAT x 9					~1h W	+17°	"	7
91/92	INBOARD/OUTBOARD HARTMANN					0h 0m	"	Fe Ar clear	50/60

CCD
Spectr. Temp. -100°C Dome Temp./Hum. 8.1°C/72.4% Transparency Conditions. clear, full moon going down

Focus 6.76 N FAN ON 346

Spectr. Temp. ____ Dome Temp./Hum. 8.2°C/61.4% @ FOCUS TEST 420 0 50 1014 4 1 coolant

Exp. Mtr.	Seeing	~~V-Dig.~~ Mag.	Sp.	Inst.	Grating/ Tilt	Slit	~~Emulsion~~	~~P.H.~~	Program	Remarks	Quality
OG 560 FILTER				CASS CCD	1800 l/m G=6100	30μm	6603 Å	11			
468	2-3"	9.40 -9.71	0.65* HOT+wd					12	Mki	5th series using repeat V471 Tau 1477 Tau. last of	
500	2"-3"	"	"					"	"	"	
1160*	2"-3"	"	"					"	"	" twilight starting now	
SKY 5000	—	"	"	** rack moved to 31950 to prevent saturation if any				"	"	* sky counts mostly sky, may be helpful for above ones	
								13			
								13			12.3K →11.9K
								1			
								13	for BIN FOCUS TEST		12.2K →11.6K
								3/4		set a bit warm now.. went through focus during the night.	
	All to DAT, D:\, M:\										

pg #1 Mon / Tues 347

Date 1995 Sep. 11.12 Observers [K.K.] T. / Sah

Emulsion Batches:

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Comparison Exp.
ce097 49/50	Inbound / outbound	Hartmann				02 44W	32°	ThAr	4/4
51	BIAS(4)								—
52	COMP							ThAr	4sec
53	HD137909	15 23 42	29 27 01	19 38 19		03 21 W			330
54	Comp							ThAr	4sec
55	HD137909	"	"	19 46 15		03 29W			360
56	Comp							ThAr	4sec
57	HD137909	"	"	19 54 39		3 38W			370
58	Comp							ThAr	4sec
59	BIAS(4)								—
60	Comp							ThAr	4
61	AD5110/46A HD165341A	18 00 24	+02 31 22	20 10 53		1 21 W			605
62	COMP							"	4
63	AD5110/46B HD165341B			20 23 52		1 48 W			1463
64	Comp							"	4

CCD
Spectr. Temp. −100? Dome Temp./Hum. 15.6°C 53.5% Transparency Conditions Mostly Clear

Focus 235 90 c gain 348

Spectr. Temp. Dome Temp./Hum. E-W slit c. 4x4 APY

Exp. Mtr.	Seeing	Pg. Mag.	Sp.	Inst.	Grating/ × Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
				echelle CCD 18.51	300 l/mm .554	60u W 400u H=.225		1/2	focus test	T=15.5, F=.235 cf, atten. 0.7 cond. 0 0 128 1024 8 1 ccdfmt	
							6300 Å?	1		0 0 256 1024 4 1 ccdfmt	
								3			
416	3"	3.66	Fp					4	Kk pgm		5.5K
								3			
460								4	Kk pgm		5.6K
								3			
413								4	Kk pgm		5.6K
								3			
								1/2			
								3			
470	2"-3"	4.20	KOV					5	Kk VisBin	brighter & NW	8.3K
								3			
152	2"-3"	5.99	K4V					6	"	fainter & SE	4K
								3			

Pg #2 349

Date 1995 September 11/12 Observers [KK] Tn / Smt

Emulsion Batches:

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Comparison Exp.
ce09765	ADS11046A HD165341	18 00 24	+12 31 22	20 50 04		1 57 W			410
66	COMP							ThAr	4
67	BIAS(4)			21 00					—
68	COMP							"	4
69	ADS12889A	19 41 48	+33 22	21 04 33		0 53 W			1733
70	COMP							"	4
71	ADS12889B	"	"	21 36 35		1 26 W			1800
72	Comp							ThAr	4s
73	ADS12889B	"	"	220835		1 58 W			1770
74	Comp							ThAr	4s
75	BIAS(4)			22 40					—
76	COMP							ThAr	4s
77	ADS14270A	20 41 36	+15 32	22 46 31		1 30 W			1453
78	Comp							ThAr	4s
79	ADS14270B	"	"	23 12 26		2 06 W			2050
80	Comp							ThAr	4s

Spectr. Temp. ...-100...°C.... Dome Temp./Hum. 13.9°C/64.6% Transparency Conditions . partly cloudy .....

Focus .....2.35..... (4.9° outside RH) meter stuck, actually 74% on catwalk. 350

Spectr. Temp. -99.5°C..... Dome Temp./Hum. ..... c1 c: 0 0 256 1024 4 1 ccdfast

Exp. Mtr.	Seeing	V Mag.	Sp.	CCD Inst. ECHELLE	X Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
222	3"	4.20	K0V	L 18.51	300 ℓ/mm .5540	60μ W 400μ H	6300 Å	5	KK Vis Bin	brighter and NW well separated	4.2k
								3			
								1/2			
								3			
18	2-3"	8.30	K3V					4	KK Vis Bin	sl. brighter and N well separated	620 above bkg
								3			
11	3"	8.40	?					5	"	sl. fainter and S, seeing not quite as good.	600 above bkg
								3			
21	3"	8.30	K3V					4	"	sl. brighter and N again.	750 above bkg
								3			
								1			
								3			
31	2-3"	7.50	K0					6	KK Vis Bin	≥ 6.5 pix apart (Looks slightly tilted) Ideal Yes	750 above bkg
								3			
13	3-4"	8.20	K?					4	KK Vis Bin	longer than intended fainter and N	400 above bkg
								3			

pg#3 Mon/Tues 351

Date 1995 Sept 11/12 Observers [illegible] J.A./Scott

Emulsion Batches:

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Comparison Exp.
Ce09781	ADS 14270A	20 41 36	+15 32	23 49 19		2 37 W			1687
82	Comp							Thar	4sec
83	B/HS(4)			0 20					—
84	COMP							"	4
85	ADS14279A HD197964	20 42 01	+15 45 50	0 23 24		2 55 W			731
86	COMP							"	4
87	ADS14279B HD197963	20 42 01	"	0 37 42		3 09 W			697
88	COMP							"	4
89	ADS14279A HD197964	"	"	0 50 59		3 17 W			400
90	COMP							"	4
91	~~B/HS~~ COMP							"	"
92	HD187691	19 46 14	+10 09 55	01 01 45		4 26 W			574
93	COMP							"	4
94	Comp							"	4
95	HD 3890	01 22 34	+88 46 26	01 17 30		2 15 E			172
96	COMP							"	4

Spectr. Temp. ..... Dome Temp./Hum. 11.7°C/79.0% Transparency Conditions ..Clr...some cloud.....

Focus .....2.35..... full moon up 352

Spectr. Temp. ..... Dome Temp./Hum. ..... cloudy 0 0 256 1024 4 1 ccdfast

Exp. Mtr.	Seeing	Pg. Mag.	Sp.	Inst.	Grating/ x Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
46	2"-3"	7.50	K0	echelle CCD 18.51	300lg/mm 15540	60u 400u H	6300Å	#6	HK Vis Bin	dbl lines again brighter and S	
								3			
								1/2			
								3			
438	3"-4"	4.50	K1 IV					2	KK Vis Bin	lots of signal. brighter & E	7.4K
								3			
180	3"	5.50	F7 V					4	HK Vis Bin	fainter & W	3K
								3			
264	3-4	4.50	K1 IV					2	KK Vis Bin	brighter & E	
								3			
								3			
72	4"	5.11	F8 V					5	Std. Vel.		1SK
								3			
								3			
750	4"	2.0	F8 Ib					4	KK	seeing not good enough to go after B	13.2K
								3			

pg#4 353

Date 1995 Sep 11/12 Observers [kk]/Tn/Smt

Emulsion Batches:

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Comparison Exp	Exp	
ce09797	HD8890	1 22 34	+88 46 26	1 23 59					116	50	4
98	COMP							ThAr	4		
99	HD8890			1 27 45		2 04 E			130	520	4
ce09800	COMP							"	4		
01	BIAS(4)			1 31					—		
02	COMP							"	4		
03	MOON - Mösting crater	1 43 37	+10 01 57	2 05 06		0 32 E			29	510	4
04	COMP							"	4		
05	MOON - Mösting crater			2 07 44		0 30 E			31	50	
06	COMP							"	4		
07	COMP							"	4		
08	HD222368	23 34 48	+5 05 03	2 15 31		1 52 W			630	38	4
09	COMP							"	4		
ce09810	BIAS(4)			2 29					—		

... continued in next logbook (82)

11.5°C/85.2%

~~clear~~ hazy, full moon, getting wet

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Comparison Filter	Comparison Exp.	EXP. METER	SEEING (")	V MAG.	SP. ~~TYPE~~	PROGRAM	ci	REMARKS	max ADU
	116	500	4"	2.0	F8 I b	KK	4		11.1K
	4						3		
	130	520	4"	"	"	KK	4		8K
	4						3		
	—						1/2		
	4						3		
	29	500	4" fair	crater size	reflected G2 V	KK Std.	2		
	4						3		
	31	500	4" fair	crater size	reflected G2 V	KK Std.	2		11K
	4						3		
	4						3		
	630	328	4"	4.13	F7 V	Std. Vel	5	~~Std~~ 95% on catwalk	44K
	4						3		
	—						1		